```
EEEEEEEEEEEEEEE  DDDDDDDDDDD     FFFFFFFFFFFFFFF
EEEEEEEEEEEEEEE  DDDDDDDDDDDD    FFFFFFFFFFFFFFF
EEEEEEEEEEEEEEE  DDDDDDDDDDDD    FFFFFFFFFFFFFFF
EEE              DDD         DDD  FFF
EEE              DDD         DDD  FFF
EEE              DDD         DDD  FFF
EEE              DDD         DDD  FFF
EEE              DDD         DDD  FFF
EEE              DDD         DDD  FFF
EEEEEEEEEEEE     DDD         DDD  FFFFFFFFFFFF
EEEEEEEEEEEE     DDD         DDD  FFFFFFFFFFFF
EEEEEEEEEEEE     DDD         DDD  FFFFFFFFFFFF
EEE              DDD         DDD  FFF
EEE              DDD         DDD  FFF
EEE              DDD         DDD  FFF
EEE              DDD         DDD  FFF
EEE              DDD         DDD  FFF
EEE              DDD         DDD  FFF
EEEEEEEEEEEEEEE  DDDDDDDDDDD     FFF
EEEEEEEEEEEEEEE  DDDDDDDDDDDD    FFF
EEEEEEEEEEEEEEE  DDDDDDDDDDDD    FFF
EEEEEEEEEEEEEEE  DDDDDDDDDDDD    FFF
```

```
Va
--
00
00
00
00
00
00
00
00
7F
7F
7F
7F
7F
7F
7F
7F
7F
7F
7F
```

```
EEEEEEEEEE  DDDDDDDD    FFFFFFFFFF  VV      VV    AAAAAA    RRRRRRRR
EEEEEEEEEE  DDDDDDDD    FFFFFFFFFF  VV      VV    AAAAAA    RRRRRRRR
EE          DD      DD  FF          VV      VV   AA    AA   RR      RR
EE          DD      DD  FF          VV      VV   AA    AA   RR      RR
EE          DD      DD  FF          VV      VV   AA    AA   RR      RR
EE          DD      DD  FF          VV      VV   AA    AA   RR      RR
EEEEEEEE    DD      DD  FFFFFFFF    VV      VV   AA    AA   RRRRRRRR
EEEEEEEE    DD      DD  FFFFFFFF    VV      VV   AA    AA   RRRRRRRR
EE          DD      DD  FF          VV      VV   AAAAAAAAAA   RR  RR
EE          DD      DD  FF          VV      VV   AAAAAAAAAA   RR  RR
EE          DD      DD  FF            VV  VV     AA    AA   RR    RR        ....
EE          DD      DD  FF            VV  VV     AA    AA   RR    RR        ....
EEEEEEEEEE  DDDDDDDD    FF              VV       AA    AA   RR      RR      ....
EEEEEEEEEE  DDDDDDDD    FF              VV       AA    AA   RR      RR      ....

LL            IIIIII      SSSSSSSS
LL            IIIIII      SSSSSSSS
LL              II      SS
LL              II      SS
LL              II      SS
LL              II      SS
LL              II        SSSSSS
LL              II        SSSSSS
LL              II              SS
LL              II              SS
LL              II              SS
LL              II              SS
LLLLLLLLLL    IIIIII    SSSSSSSS
LLLLLLLLLL    IIIIII    SSSSSSSS
```

```
0001            [ IDENT ('V04-000'),
0002        ( **
0003         *****************************************************************************\
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0023         *                                                                           *
0024         *****************************************************************************
0025
0026
0027
0028
0029
0030        FACILITY:       VAX/VMS EDF (EDIT/FDL) UTILITY
0031
0032        ABSTRACT:       This facility is used to create, modify, and optimize
0033                        FDL specification files.
0034
0035        ENVIRONMENT:    NATIVE/USER MODE
0036
0037        AUTHOR:         Ken F. Henderson Jr.
0038
0039        CREATION DATE:  27-Mar-1981
0040
0041        MODIFIED BY:
0042
0043                        V03-010 RRB0009         Rowland R. Bradley      22 Jan 1984
0044                                Enhancement for display of # buckets in Index,
0045                                # of Pages to cache index, and average # key exams.
0046
0047                        V03-009 KFH0009         Ken Henderson           10 Sep 1983
0048                                Support for named UICs.
0049
0050                        V03-008 KFH0008         Ken Henderson            8 Aug 1983
0051                                Changes for seperate compilation.
0052
0053                        V03-007 KFH0007         Ken Henderson           26 Apr 1983
0054                                Added FOUND_0, PRIMARY_INDEX_BUCKETS.
0055                                Added a bunch of initial values;
0056                                to reduce the code in INIT_EDITOR.
0057                                Added SEC_ATTR, NUMBER_KEYS_SET.
```

```
0058
0059                    V03-006 KFH0006         Ken Henderson           14 Apr 1983
0060                            Added SET_FUNCTION,
0061                            GRANULARITY, PROMPTING, RESPONSES,
0062                            JOURNAL_FILE, JOURNAL_ENABLED,
0063                            support for SEGMENTED keys.
0064
0065                    V03-005 KFH0005         Ken Henderson           31 Jan 1983
0066                            Changed reference of FDL$TYPE to
0067                            FDL3$TYPE.
0068
0069                    V03-004 KFH0004         Ken Henderson           20 Jan 1983
0070                            Removed DASH, and added
0071                            DEPTHPOINT_LEFT,_MID,_RIGHT.
0072
0073                    V03-003 KFH0003         Ken Henderson           8 Sept 1982
0074                            Consolidated many main variables
0075                            into the xDATA arrays.
0076
0077                    V03-002 KFH0002         Ken Henderson           2 April 1982
0078                            Added EDF$GL_SECNUM.
0079
0080                    V03-001 KFH0001         Ken Henderson           23-Mar-1982
0081                            Took out EDIT$DL.
0082
0083            -- )
```

```
0085            ENVIRONMENT ('LIB$:EDFVAR'),
0086
0087            INHERIT (
0088
0089            'SYS$LIBRARY:STARLET',
0090            'SHRLIB$:FDLPARDEF',
0091            'LIB$:EDFCONST',
0092            'LIB$:EDFTYPE',
0093            'LIB$:EDFSTRUCT'
0094
0095            )]
0096
0097            MODULE EDFVAR;
0098
0099            VAR
0100
0101                {+
0102                These are for the FDL file(s).
0103                -}
0104                FDL_DEST                    : [VOLATILE] TEXT;
0105                TT                          : TEXT;
0106                JOURNAL_FILE                : [VOLATILE] TEXT;
0107                JOURNAL_ENABLED             : [VOLATILE] BOOLEAN := FALSE;
0108                JOURNAL_FILENAME            : STRING255;
0109                INPUT_FILENAME_DESC         : DESCRIPTOR;
0110                OUTPUT_FILENAME_DESC        : DESCRIPTOR;
0111                ANALYSIS_FILENAME_DESC      : DESCRIPTOR;
0112                RES_OUTPUT_FILENAME_DESC    : [VOLATILE] DESCRIPTOR;
0113                DEFAULT_FILENAME_DESC       : DESCRIPTOR;
0114                NL_DEV_DESC                 : DESCRIPTOR;
0115                ANALYSIS_SPECIFIED          : BOOLEAN := FALSE;
0116                ANALYSIS_ONLY               : [VOLATILE] BOOLEAN := FALSE;
0117
0118                {+
0119                These are the main editing control variables.
0120                While editing is true, we stay in the editor.
0121                Take_defaults is true if we're answering questions
0122                automatically.
0123                If no_input is true, we skip the input_fdl_file operation.
0124                If auto_tune is true, we don't do any output to the terminal,
0125                or expect any from it. It's all an automated Optimize script.
0126                -}
0127                EDITING                     : [VOLATILE] BOOLEAN := FALSE;
0128                TAKE_DEFAULTS               : BOOLEAN := FALSE;
0129                NO_INPUT                    : BOOLEAN := FALSE;
0130                AUTO_TUNE                   : [VOLATILE] BOOLEAN := FALSE;
0131
0132                {+
0133                This is for outputting FDL to the terminal.
0134                -}
0135                SYS$OUTPUT_NAME     : [VOLATILE] STRING11 := 'SYS$OUTPUT:';
0136
0137                {+
0138                These indicate whether classes of errors were detected.
0139                -}
0140                SYS$INPUT_ERROR     : [VOLATILE] BOOLEAN := FALSE;
0141                RMS_INPUT_ERROR     : [VOLATILE] BOOLEAN := FALSE;
```

```
0142            RMS_OUTPUT_ERROR    : [VOLATILE] BOOLEAN := FALSE;
0143            CONTROL_ZEE_TYPED   : [VOLATILE] BOOLEAN := FALSE;
0144            MAIN_CTRLZ          : [VOLATILE] BOOLEAN := FALSE;
0145            MAIN_LEVEL          : [VOLATILE] BOOLEAN := TRUE;
0146            QUESTION_TYPED      : [VOLATILE] BOOLEAN := FALSE;
0147
0148            { +
0149            This is for graphing.
0150            - }
0151            XY_PLOT             : XY_PLOT_TYPE;
0152            COLOR_PLOT          : XY_PLOT_TYPE;
0153            XY_ARRAY            : XY_ARRAY_TYPE;
0154            COLOR_ARRAY         : XY_ARRAY_TYPE;
0155            COLOR_ROW           : PACKED ARRAY [0..(BKT$C_MAXBKTSIZ-1)] OF BYTE;
0156            BREAKPOINT_LEFT     : INTEGER;
0157            BREAKPOINT_MID      : INTEGER;
0158            BREAKPOINT_RIGHT    : INTEGER;
0159            DEPTHPOINT_LEFT     : INTEGER;
0160            DEPTHPOINT_MID      : INTEGER;
0161            DEPTHPOINT_RIGHT    : INTEGER;
0162            EXAMPOINT_LEFT      : INTEGER;
0163            EXAMPOINT_MID       : INTEGER;
0164            EXAMPOINT_RIGHT     : INTEGER;
0165            NUMPOINT_LEFT       : INTEGER;
0166            NUMPOINT_MID        : INTEGER;
0167            NUMPOINT_RIGHT      : INTEGER;
0168            PAGEPOINT_LEFT      : INTEGER;
0169            PAGEPOINT_MID       : INTEGER;
0170            PAGEPOINT_RIGHT     : INTEGER;
0171            GRAPH_TYPE          : INTEGER;
0172            CURRENT_GRAPH_INDEX : INTEGER;
0173            LAST_GRAPH_INDEX    : INTEGER;
0174            STEPS               : INTEGER;
0175            Y_LABEL             : STRING32;
0176
0177            { +
0178            These are the 'width' arrays that indicate how long a particular keyword
0179            should be typed.
0180            - }
0181            PRIMARY_WIDTH       : PACKED ARRAY [PRIMARY_TYPE] OF BYTE;
0182            SECONDARY_WIDTH     : PACKED ARRAY [SECONDARY_TYPE] OF BYTE;
0183
0184            { +
0185            This array stores the maximum value of the number-valued secondaries.
0186            - }
0187            SECONDARY_MAX       : ARRAY [SECONDARY_TYPE] OF INTEGER;
0188
0189            { +
0190            This array stores the legal sequencing of Primaries as defined by the
0191            FDL Specification.
0192            - }
0193            PRI_SEQ             : [VOLATILE] PACKED ARRAY [PRIMARY_TYPE] OF BYTE;
0194
0195            { +
0196            These store the character sequences to set the video attribute modes
0197            of the VT100 (and compatible) terminals.
0198            - }
```

```
0199            ANSI_RESET          : [VOLATILE] STRING4 := (''(27)'','[','0','m');
0200            ANSI_BOLD           : STRING4 := (''(27)'','[','1','m');
0201            ANSI_UNDERSCORE     : STRING4 := (''(27)'','[','4','m');
0202            ANSI_BLINK          : STRING4 := (''(27)'','[','5','m');
0203            ANSI_REVERSE        : [VOLATILE] STRING4 := (''(27)'','[','7','m');
0204
0205            VID_STRING4         : STRING4;
0206            NULL_STRING4        : STRING4 := (''(0)'',''(0)'',''(0)'',''(0)'');
0207            EMPTY_STRING        : STRING2 := ('','');
0208            SHIFT               : [VOLATILE] STRING4 :=
0209                                  (''(9)'',''(0)'',''(0)'',''(0)'');
0210            CRLF_SHIFT          : [VOLATILE] STRING6 :=
0211                                  (''(13)'',''(10)'',''(9)'',''(0)'',''(0)'',''(0)'');
0212            LOW_SHIFT           : STRING3;
0213
0214            NULL_CHAR           : CHAR := (''(0)'');
0215
0216            { +
0217            This is the terminal and screen database.
0218            - }
0219            TAB                 : CHAR := (''(9)'');
0220            ESCAPE              : [VOLATILE] CHAR := (''(27)'');
0221            APOSTROPHE          : CHAR := (''(39)'');
0222            CONTROL_W           : CHAR := (''(23)'');
0223            CONTROL_Z           : [VOLATILE] CHAR := (''(26)'');
0224            QUESTION_MARK       : [VOLATILE] CHAR := (''(63)'');
0225            ERR_CHAR            : [VOLATILE] CHAR;
0226            CONTROL_G           : CHAR := (''(7)'');
0227            CRLF                : [VOLATILE] STRING2 := (''(13)'',''(10)'');
0228            TERMINAL_TYPE       : BYTE;
0229            TERMINAL_SPEED      : INTEGER;
0230            ANSI_CRT            : BOOLEAN := FALSE;
0231            REGIS               : [VOLATILE] BOOLEAN := FALSE;
0232            DEC_CRT             : BOOLEAN := FALSE;
0233            DEV_TYPE            : INTEGER;
0234            VIDEO_TERMINAL      : BOOLEAN := FALSE;
0235            VID_TERM            : INTEGER;
0236            SCREEN_FLAGS        : [VOLATILE] SCR1$TYPE;
0237            OUT_LINE            : [VOLATILE] TEMP_VARYING;
0238            ONE                 : [VOLATILE] INTEGER := 1;
0239            CHFFLAGS            : [VOLATILE] INTEGER := 0;
0240            FLAGS               : [VOLATILE] FDL2$TYPE;
0241            TEMP_FDL3$TYPE      : [VOLATILE] FDL3$TYPE;
0242            LINE_WIDTH          : INTEGER;
0243            LINES_PER_PAGE      : [VOLATILE] INTEGER;
0244            DEST_IS_TERMINAL    : [VOLATILE] BOOLEAN;
0245            LINES_SHOWN         : [VOLATILE] INTEGER;
0246            MINIMUM_TERM_WIDTH  : INTEGER := 80;
0247            MINIMUM_VIDEO_PAGE  : INTEGER := 24;
0248            SCROLLING_SET       : [VOLATILE] BOOLEAN := FALSE;
0249            FULL_PROMPT         : BOOLEAN := TRUE;
0250            TEMP_FULL_PROMPT    : [VOLATILE] BOOLEAN := FALSE;
0251            ORIG_TIME           : REAL;
0252            QUAD_TIME           : QUADWORD;
0253
0254            DEFAULT_PRIMARY     : PRIMARY_TYPE := FILE$;
0255            DEFAULT_PRINUM      : INTEGER := 0;
```

```

        COL_ONE             : INTEGER := 1;
        LINE_ONE            : [VOLATILE] INTEGER := 1;
        LOWER_LINE          : INTEGER := 17;
        PROMPT_LINE         : INTEGER := 23;

        PARAM_BLOCK         : [VOLATILE]TPA$TYPE;

        SEC_ATTR            : STRING22 := ' Secondary Attributes ';
        EDFHLP_STRING       : STRING6 := 'EDFHLP';
        IDENT_STRING        : STRING40 :=
                              '                              VAX-11 FDL Editor';
        IDENT_STRING_LENGTH : INTEGER := 40;
        QUES_HINT           : STRING31 := '(Type "?" for list of Keywords)';
        EDF_HEADER          : STRING19 := ' VAX-11 FDL Editor ';
        CONTINUE_TEXT       : STRING45 :=
                              ' Press RETURN to continue (^Z for Main Menu) ';
        ISTATUS             : [VOLATILE] INTEGER;
        FAB_DUMMY           : FAB_PTR;
        RAB_DUMMY           : FAB_PTR;

        FDL_BLOCK           : [VOLATILE] ^FDL_TYPE;
        FDL$AL_BLOCK        : [EXTERNAL,VOLATILE] INTEGER;

        EDF$GL_SECNUM                   : [EXTERNAL,VOLATILE] LONG;
        EDF$GL_PROT_MASK                : [EXTERNAL] CTRL_ARRAY;
        EDF$GL_FID1                     : [EXTERNAL,VOLATILE] LONG;
        EDF$GL_FID2                     : [EXTERNAL,VOLATILE] LONG;
        EDF$GL_FID3                     : [EXTERNAL,VOLATILE] LONG;
        EDF$GL_OWNER_UIC                : [EXTERNAL,VOLATILE] LONG;
        EDF$GL_SPARET                   : [EXTERNAL,VOLATILE] LONG;
        EDF$AB_STRING                   : [EXTERNAL,VOLATILE] DESCRIPTOR;
        EDF$AB_COMMENT                  : [EXTERNAL,VOLATILE] DESCRIPTOR;
        EDF$AB_UIC_TABLE_KEY            : [EXTERNAL,VOLATILE] LONG;
        EDF$AB_UIC_TABLE_STA            : [EXTERNAL,VOLATILE] LONG;
        EDF$AB_FID_TABLE_KEY            : [EXTERNAL,VOLATILE] LONG;
        EDF$AB_FID_TABLE_STA            : [EXTERNAL,VOLATILE] LONG;
        EDF$AB_PRIMARY_TABLE_KEY        : [EXTERNAL,VOLATILE] LONG;
        EDF$AB_PRIMARY_TABLE_STA        : [EXTERNAL,VOLATILE] LONG;
        EDF$AB_ACCESS_TABLE_KEY         : [EXTERNAL,VOLATILE] LONG;
        EDF$AB_ACCESS_TABLE_STA         : [EXTERNAL,VOLATILE] LONG;
        EDF$AB_ACL_TABLE_KEY            : [EXTERNAL,VOLATILE] LONG;
        EDF$AB_ACL_TABLE_STA            : [EXTERNAL,VOLATILE] LONG;
        EDF$AB_AREA_TABLE_KEY           : [EXTERNAL,VOLATILE] LONG;
        EDF$AB_AREA_TABLE_STA           : [EXTERNAL,VOLATILE] LONG;
        EDF$AB_CONNECT_TABLE_KEY        : [EXTERNAL,VOLATILE] LONG;
        EDF$AB_CONNECT_TABLE_STA        : [EXTERNAL,VOLATILE] LONG;
        EDF$AB_DATE_TABLE_KEY           : [EXTERNAL,VOLATILE] LONG;
        EDF$AB_DATE_TABLE_STA           : [EXTERNAL,VOLATILE] LONG;
        EDF$AB_FILE_TABLE_KEY           : [EXTERNAL,VOLATILE] LONG;
        EDF$AB_FILE_TABLE_STA           : [EXTERNAL,VOLATILE] LONG;
        EDF$AB_JOURNAL_TABLE_KEY        : [EXTERNAL,VOLATILE] LONG;
        EDF$AB_JOURNAL_TABLE_STA        : [EXTERNAL,VOLATILE] LONG;
        EDF$AB_KEY_TABLE_KEY            : [EXTERNAL,VOLATILE] LONG;
        EDF$AB_KEY_TABLE_STA            : [EXTERNAL,VOLATILE] LONG;
        EDF$AB_RECORD_TABLE_KEY         : [EXTERNAL,VOLATILE] LONG;
        EDF$AB_RECORD_TABLE_STA         : [EXTERNAL,VOLATILE] LONG;
```

```
0313        EDF$AB_SHARING_TABLE_KEY        : [EXTERNAL,VOLATILE] LONG;
0314        EDF$AB_SHARING_TABLE_STA        : [EXTERNAL,VOLATILE] LONG;
0315        EDF$AB_SYSTEM_TABLE_KEY         : [EXTERNAL,VOLATILE] LONG;
0316        EDF$AB_SYSTEM_TABLE_STA         : [EXTERNAL,VOLATILE] LONG;
0317        EDF$AB_POSIT_TABLE_KEY          : [EXTERNAL,VOLATILE] LONG;
0318        EDF$AB_POSIT_TABLE_STA          : [EXTERNAL,VOLATILE] LONG;
0319        EDF$AB_PROT_TABLE_KEY           : [EXTERNAL,VOLATILE] LONG;
0320        EDF$AB_PROT_TABLE_STA           : [EXTERNAL,VOLATILE] LONG;
0321        EDF$AB_ORG_TABLE_KEY            : [EXTERNAL,VOLATILE] LONG;
0322        EDF$AB_ORG_TABLE_STA            : [EXTERNAL,VOLATILE] LONG;
0323        EDF$AB_SOURCE_TABLE_KEY         : [EXTERNAL,VOLATILE] LONG;
0324        EDF$AB_SOURCE_TABLE_STA         : [EXTERNAL,VOLATILE] LONG;
0325        EDF$AB_RU_TABLE_KEY             : [EXTERNAL,VOLATILE] LONG;
0326        EDF$AB_RU_TABLE_STA             : [EXTERNAL,VOLATILE] LONG;
0327        EDF$AB_CARR_TABLE_KEY           : [EXTERNAL,VOLATILE] LONG;
0328        EDF$AB_CARR_TABLE_STA           : [EXTERNAL,VOLATILE] LONG;
0329        EDF$AB_FORMAT_TABLE_KEY         : [EXTERNAL,VOLATILE] LONG;
0330        EDF$AB_FORMAT_TABLE_STA         : [EXTERNAL,VOLATILE] LONG;
0331        EDF$AB_TYPE_TABLE_KEY           : [EXTERNAL,VOLATILE] LONG;
0332        EDF$AB_TYPE_TABLE_STA           : [EXTERNAL,VOLATILE] LONG;
0333        EDF$AB_LOAD_METHOD_TABLE_KEY    : [EXTERNAL,VOLATILE] LONG;
0334        EDF$AB_LOAD_METHOD_TABLE_STA    : [EXTERNAL,VOLATILE] LONG;
0335        EDF$AB_WEIGHT_TABLE_KEY         : [EXTERNAL,VOLATILE] LONG;
0336        EDF$AB_WEIGHT_TABLE_STA         : [EXTERNAL,VOLATILE] LONG;
0337        EDF$AB_SURFACE_OPTION_TABLE_KEY : [EXTERNAL,VOLATILE] LONG;
0338        EDF$AB_SURFACE_OPTION_TABLE_STA : [EXTERNAL,VOLATILE] LONG;
0339        EDF$AB_CURRENT_FUNC_TABLE_KEY   : [EXTERNAL,VOLATILE] LONG;
0340        EDF$AB_CURRENT_FUNC_TABLE_STA   : [EXTERNAL,VOLATILE] LONG;
0341        EDF$AB_DESIGN_CYCLE_TABLE_KEY   : [EXTERNAL,VOLATILE] LONG;
0342        EDF$AB_DESIGN_CYCLE_TABLE_STA   : [EXTERNAL,VOLATILE] LONG;
0343        EDF$AB_SCRIPT_OPTION_TABLE_KEY  : [EXTERNAL,VOLATILE] LONG;
0344        EDF$AB_SCRIPT_OPTION_TABLE_STA  : [EXTERNAL,VOLATILE] LONG;
0345        EDF$AB_YES_NO_TABLE_KEY         : [EXTERNAL,VOLATILE] LONG;
0346        EDF$AB_YES_NO_TABLE_STA         : [EXTERNAL,VOLATILE] LONG;
0347        EDF$AB_SET_FUNCTION_TABLE_KEY   : [EXTERNAL,VOLATILE] LONG;
0348        EDF$AB_SET_FUNCTION_TABLE_STA   : [EXTERNAL,VOLATILE] LONG;
0349        EDF$AB_GRANULARITY_TABLE_KEY    : [EXTERNAL,VOLATILE] LONG;
0350        EDF$AB_GRANULARITY_TABLE_STA    : [EXTERNAL,VOLATILE] LONG;
0351        EDF$AB_PROMPTING_TABLE_KEY      : [EXTERNAL,VOLATILE] LONG;
0352        EDF$AB_PROMPTING_TABLE_STA      : [EXTERNAL,VOLATILE] LONG;
0353        EDF$AB_RESPONSES_TABLE_KEY      : [EXTERNAL,VOLATILE] LONG;
0354        EDF$AB_RESPONSES_TABLE_STA      : [EXTERNAL,VOLATILE] LONG;
0355
0356        { +
0357        The following are the pointers to the Definition Linked List.
0358        - }
0359        DEF_CURRENT         : [VOLATILE] ^LINE_OBJECT := NIL;
0360        DEF_SCRATCH         : [VOLATILE] ^LINE_OBJECT := NIL;
0361        DEF_HEAD            : [VOLATILE] ^LINE_OBJECT := NIL;
0362        DEF_TAIL            : [VOLATILE] ^LINE_OBJECT := NIL;
0363        DEF_SUCC            : [VOLATILE] ^LINE_OBJECT := NIL;
0364        DEF_PRED            : [VOLATILE] ^LINE_OBJECT := NIL;
0365
0366        { +
0367        These point to the analysis linked list.
0368        - }
0369        DEF_ANL_HEAD        : ^LINE_OBJECT := NIL;
```

```
0370            DEF_ANL_TAIL        : ^LINE_OBJECT := NIL;
0371            DEF_SAVE_HEAD       : ^LINE_OBJECT := NIL;
0372            DEF_SAVE_TAIL       : ^LINE_OBJECT := NIL;
0373
0374            POINTING_AT_DEFINITION      : BOOLEAN := TRUE;
0375
0376            FILE_CREATED                : [VOLATILE] BOOLEAN := FALSE;
0377
0378            { +
0379            These are used for input string processing.
0380            - }
0381            INPUT_DESC          : [VOLATILE] DESCRIPTOR;
0382            INPUT_STRING        : [VOLATILE] STRING255;
0383            INPUT_VALUE         : INTEGER;
0384            INPUT_NUMBER        : INTEGER;
0385
0386            QUAD_DESC           : [VOLATILE] RECORD
0387                                    CASE QWHICH : QD_SWITCH OF
0388                                        QWORD   : (TWOLONG : PACKED RECORD
0389                                                     L1,L2 : LONG
0390                                                     END);
0391                                        DWORD   : (DSC : DESCRIPTOR)
0392                                    END;
0393
0394            { +
0395            ACTIVE CALCULATION DATABASE.
0396            - }
0397            LINKED                      : BOOLEAN;
0398            ACTIVE_AREA                 : INTEGER;
0399            ACTIVE_PRIMARY              : PRIMARY_TYPE;
0400            VARIABLE_RECORDS            : BOOLEAN;
0401            CUR_MAX_REC                 : INTEGER;
0402            BYTES_PER_BUCKET            : INTEGER;
0403            BUCKET_DEFAULT              : INTEGER;
0404            PRIMARY_INDEX_BUCKETS       : INTEGER;
0405            INIT_PRIMARY_BUCKETS        : ARRAY [0..31] OF INTEGER;
0406            ADDED_PRIMARY_BUCKETS       : ARRAY [0..31] OF INTEGER;
0407            INIT_NUMBER_BUCKETS         : ARRAY [0..31] OF INTEGER;
0408            ADDED_NUMBER_BUCKETS        : ARRAY [0..31] OF INTEGER;
0409            RECS_PER_BUCKET             : ARRAY [0..31] OF INTEGER;
0410            DEEPEST                     : INTEGER;
0411            FIRST_PLOT                  : BOOLEAN;
0412            OPTIMIZING                  : BOOLEAN;
0413            VISIBLE_QUESTION            : BOOLEAN;
0414            WAIT_HELP                   : BOOLEAN;
```

```
0416            { +
0417            QTAB is the table that drives the Q+A routine - QUERY
0418            The xDATA arrays hold the main EDF database.
0419            - }
0420            QTAB        : ARRAY [EDF$K_QTABSTART..EDF$K_QTABEND] OF QTAB_ENTRY;
0421            QTAB_OFFSET : INTEGER;
0422
0423            { +
0424            String descriptor elements
0425            - }
0426            SDATA       : ARRAY [EDF$K_SDATASTART..EDF$K_SDATAEND] OF DESCRIPTOR;
0427
0428            { +
0429            Real elements
0430            - }
0431            RDATA       : ARRAY [EDF$K_RDATASTART..EDF$K_RDATAEND] OF REAL;
0432
0433            { +
0434            Boolean elements
0435            - }
0436            BDATA       : ARRAY [EDF$K_BDATASTART..EDF$K_BDATAEND] OF BOOLEAN;
0437
0438            { +
0439            Integer elements
0440            - }
0441            IDATA       : ARRAY [EDF$K_IDATASTART..EDF$K_IDATAEND] OF INTEGER;
0442
0443            { +
0444            Valid (boolean) elements
0445            - }
0446            VDATA       : ARRAY [EDF$K_VDATASTART..EDF$K_VDATAEND] OF BOOLEAN;
0447
0448            { +
0449            Misc. scratch variables used during the Q+A.
0450            - }
0451            TEMP_STRING255              : STRING255;
0452            TEMP_DESCRIPTOR             : [VOLATILE] DESCRIPTOR;
0453            QUERY_FLAG                  : BOOLEAN;
0454            LOW_KEY                     : INTEGER := 0;
0455            HIGH_KEY                    : INTEGER := 0;
0456            LOW_AREA                    : INTEGER := 0;
0457            HIGH_AREA                   : INTEGER := 0;
0458            FOUND_AREA                  : BOOLEAN := FALSE;
0459            FOUND_KEY                   : BOOLEAN := FALSE;
0460            FOUND_0                     : BOOLEAN := FALSE;
0461            MAX_KEY_SIZE                : INTEGER;
0462            MIN_KEY_SIZE                : INTEGER;
0463            SEGMENT_WANTED              : ARRAY [0..7] OF BOOLEAN :=
0464                                    (FALSE,FALSE,FALSE,FALSE,FALSE,FALSE,FALSE,FALSE);
0465            SEGMENT_POSITION            : ARRAY [0..7] OF INTEGER;
0466            SEGMENT_LENGTH              : ARRAY [0..7] OF INTEGER;
0467            SEGMENT_NUMBER              : INTEGER;
0468            BUCKET_OVERHEAD             : INTEGER;
0469            MIN_BUCKET                  : INTEGER;
0470            ENTRY_SIZE                  : INTEGER;
0471            LOWMAX                      : INTEGER;
0472            EXTRA                       : INTEGER;
```

```
0473            CUR_MAX_FIXED               : INTEGER;
0474            MAX_STRING_ANSWER_LENGTH    : INTEGER;
0475            OLD_COUNT                   : INTEGER;
0476            GLOBAL_SET                  : BOOLEAN;
0477            NUMBER_KEYS_SET             : BOOLEAN := FALSE;
0478            ISAM_ORG                    : BOOLEAN;
0479            MAX_KEY_POSITION            : INTEGER;
0480            TEMP_REAL                   : REAL;
0481            TEMP_STATUS                 : INTEGER;
0482            TEMP_INT2                   : INTEGER;
0483            DEF                         : INTEGER;
0484            NULL_STRING                 : [VOLATILE]DESCRIPTOR;
0485            TEST                        : LINE_OBJECT;
0486            FULL_CHOICE                 : BOOLEAN;
0487
0488            { *
0489            This is the array of secondary value types.
0490            * }
0491            SEC_TYPE                    : [VOLATILE] PACKED ARRAY [SECONDARY_TYPE] OF
0492                                              PACKED RECORD
0493                                                       STR     : BOOLEAN;
0494                                                       NUM     : BOOLEAN;
0495                                                       QUAL    : BOOLEAN;
0496                                                       SW      : BOOLEAN
0497                                              END;
0498
0499            { *
0500            This is the template for line_objects generated by MAKE_SCRATCH.
0501            * }
0502            LINE_OBJECT_TEMPLATE        : [VOLATILE] LINE_OBJECT;
```

```
0504        VALUE
0505        %INCLUDE 'SRC$:EDFVALUE.PAS'
0506  I     ( **
0507  I
0508  I                 FILE: SRC$:EDFVALUE.PAS - Pascal include file to define
0509  I                 initial values of selected top-level variables.
0510  I
0511  I      ************************************************************************
0512  I      *                                                                      *
0513  I      *  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                             *
0514  I      *  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.              *
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0529  I      *  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.             *
0530  I      *                                                                      *
0531  I      *                                                                      *
0532  I      ************************************************************************
0533  I
0534  I
0535  I
0536  I
0537  I
0538  I           FACILITY:       VAX/VMS EDF (EDIT/FDL) UTILITY
0539  I
0540  I           ABSTRACT:       This facility is used to create, modify, and optimize
0541  I                           FDL specification files.
0542  I
0543  I           ENVIRONMENT:    NATIVE/USER MODE
0544  I
0545  I           AUTHOR:         Ken F. Henderson Jr.
0546  I
0547  I           CREATION DATE:  27-Mar-1981
0548  I
0549  I           MODIFIED BY:
0550  I
0551  I                           V03-009 KFH0009         Ken Henderson          10 Sep 1983
0552  I                                   Support named UICs.
0553  I
0554  I                           V03-008 KFH0008         Ken Henderson           9 Aug 1983
0555  I                                   Fix max value of CLUSTER_SIZE.
0556  I                                   Fix default of QTAB[TEST_PRIMARY].
0557  I
0558  I                           V03-007 KFH0007         Ken Henderson          30 Jul 1983
0559  I                                   Fix SEC_TYPE table for audit_trail.
0560  I                                   Add DEFERRED_WRITE.
```

```
0561  I
0562  I                       V03-006 KFH0006         Ken Henderson           26 Apr 1983
0563  I                               Fix various defaults in QTAB.
0564  I                               Transferred some initializations to
0565  I                               the EDFVAR declarations.
0566  I
0567  I                       V03-005 KFH0005         Ken Henderson           14 Apr 1983
0568  I                               Changed max bucketsize to 63 from 65.
0569  I                               Added ANALYSIS, OUTPUT, RESPONSES,
0570  I                               PROMPTING, SET_FUNCTION, GRANULARITY.
0571  I                               Added support for SEGMENTED keys.
0572  I
0573  I                       V03-004 KFH0004         Ken Henderson            7 Mar 1983
0574  I                               Changed max bucketsize to 65 from 127.
0575  I
0576  I                       V03-003 KFH0003         Ken Henderson           11 Sept 1982
0577  I                               Added initialization of VDATA and BDATA.
0578  I
0579  I                       V03-002 KFH0002         Ken Henderson           9 Sept 1982
0580  I                               Added initialization of QTAB.
0581  I
0582  I                       V03-001 KFH0001         Ken Henderson           23-Mar-1982
0583  I                               Took out reference to EDITFDL_STRING
0584  I
0585  I               -- )
```

```
0587  I          { +
0588  I          Initialize the Boolean-array to all false.
0589  I          - }
0590  I          BDATA       := (
0591  I                      FALSE,
0592  I                      FALSE,
0593  I                      FALSE,
0594  I                      FALSE,
0595  I                      FALSE,
0596  I                      FALSE,
0597  I                      FALSE,
0598  I                      FALSE,
0599  I                      FALSE,
0600  I                      FALSE,
0601  I                      FALSE,
0602  I                      FALSE,
0603  I                      FALSE,
0604  I                      FALSE,
0605  I                      FALSE,
0606  I                      FALSE,
0607  I                      FALSE,
0608  I                      FALSE,
0609  I                      FALSE,
0610  I                      FALSE,
0611  I                      FALSE,
0612  I                      FALSE,
0613  I                      FALSE,
0614  I                      FALSE,
0615  I                      FALSE
0616  I                      );
0617  I
0618  I          { +
0619  I          Initialize the String-array to all null-string.
0620  I          - }
0621  I          SDATA       := (
0622  I
0623  I              (0,DSC$K_DTYPE_T,DSC$K_CLASS_D,NIL),
0624  I              (0,DSC$K_DTYPE_T,DSC$K_CLASS_D,NIL),
0625  I              (0,DSC$K_DTYPE_T,DSC$K_CLASS_D,NIL),
0626  I              (0,DSC$K_DTYPE_T,DSC$K_CLASS_D,NIL),
0627  I              (0,DSC$K_DTYPE_T,DSC$K_CLASS_D,NIL),
0628  I              (0,DSC$K_DTYPE_T,DSC$K_CLASS_D,NIL)
0629  I
0630  I                      );
0631  I
0632  I          { +
0633  I          Initialize the Valid-array to all false.
0634  I          - }
0635  I          VDATA       := (
0636  I                      FALSE,
0637  I                      FALSE,
0638  I                      FALSE,
0639  I                      FALSE,
0640  I                      FALSE,
0641  I                      FALSE,
0642  I                      FALSE,
0643  I                      FALSE,
```

```
0644  I                  FALSE,
0645  I                  FALSE,
0646  I                  FALSE,
0647  I                  FALSE,
0648  I                  FALSE,
0649  I                  FALSE,
0650  I                  FALSE,
0651  I                  FALSE,
0652  I                  FALSE,
0653  I                  FALSE,
0654  I                  FALSE,
0655  I                  FALSE,
0656  I                  FALSE,
0657  I                  FALSE,
0658  I                  FALSE,
0659  I                  FALSE,
0660  I                  FALSE,
0661  I                  FALSE,
0662  I                  FALSE,
0663  I                  FALSE,
0664  I                  FALSE,
0665  I                  FALSE,
0666  I                  FALSE,
0667  I                  FALSE,
0668  I                  FALSE,
0669  I                  FALSE,
0670  I                  FALSE,
0671  I                  FALSE,
0672  I                  FALSE,
0673  I                  FALSE,
0674  I                  FALSE,
0675  I                  FALSE,
0676  I                  FALSE,
0677  I                  FALSE,
0678  I                  FALSE,
0679  I                  FALSE,
0680  I                  FALSE,
0681  I                  FALSE,
0682  I                  FALSE,
0683  I                  FALSE,
0684  I                  FALSE,
0685  I                  FALSE,
0686  I                  FALSE,
0687  I                  FALSE,
0688  I                  FALSE,
0689  I                  FALSE,
0690  I                  FALSE,
0691  I                  FALSE,
0692  I                  FALSE,
0693  I                  FALSE,
0694  I                  FALSE,
0695  I                  FALSE,
0696  I                  FALSE,
0697  I                  FALSE,
0698  I                  FALSE
0699  I                  );
0700  I
```

```
0701  I          { +
0702  I          Initialize the sequencing array.
0703  I          - }
0704  I          PRI_SEQ     := (
0705  I                          15,         { DUMMY_PRIMARY$ }
0706  I
0707  I                          8,          { ACCESS, }
0708  I                          4,          { ACL, }
0709  I                          13,         { ANALYSIS_OF_AREA, }
0710  I                          14,         { ANALYSIS_OF_KEY, }
0711  I                          11,         { AREA, }
0712  I                          10,         { CONNECT, }
0713  I                          4,          { DATE, }
0714  I                          3,          { FILE$, }
0715  I                          1,          { IDENT, }
0716  I                          6,          { JOURNAL, }
0717  I                          12,         { KEY, }
0718  I                          7,          { RECORD$, }
0719  I                          9,          { SHARING, }
0720  I                          2,          { SYSTEM, }
0721  I                          0           { TITLE }
0722  I                          );
0723  I
0724  I          { +
0725  I          Initialize the 'width' arrays - that indicate how long a particular
0726  I          keyword should be printed.
0727  I          - }
0728  I          PRIMARY_WIDTH := (
0729  I                          0,          { DUMMY_PRIMARY$ }
0730  I
0731  I                          6,          { ACCESS, }
0732  I                          3,          { ACL, }
0733  I                          16,         { ANALYSIS_OF_AREA, }
0734  I                          15,         { ANALYSIS_OF_KEY, }
0735  I                          4,          { AREA, }
0736  I                          7,          { CONNECT, }
0737  I                          4,          { DATE, }
0738  I                          4,          { FILE$, }
0739  I                          5,          { IDENT, }
0740  I                          7,          { JOURNAL, }
0741  I                          3,          { KEY, }
0742  I                          6,          { RECORD$, }
0743  I                          7,          { SHARING, }
0744  I                          6,          { SYSTEM, }
0745  I                          5           { TITLE }
0746  I                          );
0747  I
0748  I              SECONDARY_WIDTH := (
0749  I
0750  I          { RESERVE 0 }   0,          { DUMMY_SECONDARY$, }
0751  I
0752  I          { ACCESS PRIMARY }
0753  I
0754  I                          8,          { BLOCK_IO$ }
0755  I                          6,          { DELETE$ }
0756  I                          3,          { GET$ }
0757  I                          3,          { PUT$ }
```

```
0758  I                    9,          { RECORD_IO$ }
0759  I                    8,          { TRUNCATE$ }
0760  I                    6,          { UPDATE$ }
0761  I
0762  I          { ACL PRIMARY }
0763  I
0764  I                    5,          { ENTRY }
0765  I
0766  I          { ANALYSIS_OF_AREA PRIMARY }
0767  I                    15,         { RECLAIMED_SPACE }
0768  I
0769  I          { ANALYSIS_OF_KEY PRIMARY }
0770  I
0771  I                    9,          { DATA_FILL$, }
0772  I                    20,         { DATA_KEY_COMPRESSION, }
0773  I                    23,         { DATA_RECORD_COMPRESSION, }
0774  I                    17,         { DATA_RECORD_COUNT, }
0775  I                    19,         { DATA_SPACE_OCCUPIED, }
0776  I                    9,          { DELETIONS, }
0777  I                    5,          { DEPTH, }
0778  I                    19,         { DUPLICATES_PER_SIDR, }
0779  I                    17,         { INDEX_COMPRESSION, }
0780  I                    10,         { INDEX_FILL$, }
0781  I                    20,         { INDEX_SPACE_OCCUPIED, }
0782  I                    19,         { LEVEL1_RECORD_COUNT }
0783  I                    16,         { MEAN_DATA_LENGTH, }
0784  I                    17,         { MEAN_INDEX_LENGTH, }
0785  I                    15,         { RANDOM_ACCESSES, }
0786  I                    14,         { RANDOM_INSERTS, }
0787  I                    19,         { SEQUENTIAL_ACCESSES, }
0788  I
0789  I          { AREA PRIMARY }
0790  I
0791  I                    10,         { ALLOCATION$, }
0792  I                    19,         { BEST_TRY_CONTIGUOUS$, }
0793  I                    11,         { BUCKET_SIZE$, }
0794  I                    10,         { CONTIGUOUS$, }
0795  I                    17,         { EXACT_POSITIONING$, }
0796  I                    9,          { EXTENSION$, }
0797  I                    8,          { POSITION$, }
0798  I                    6,          { VOLUME$, }
0799  I
0800  I          { CONNECT PRIMARY }
0801  I
0802  I                    12,         { ASYNCHRONOUS }
0803  I                    8,          { BLOCK_IO }
0804  I                    11,         { BUCKET_CODE }
0805  I                    7,          { CONTEXT }
0806  I                    11,         { END_OF_FILE }
0807  I                    12,         { FILL_BUCKETS }
0808  I                    11,         { FAST_DELETE }
0809  I                    16,         { KEY_OF_REFERENCE }
0810  I                    17,         { KEY_GREATER_EQUAL }
0811  I                    16,         { KEY_GREATER_THAN }
0812  I                    9,          { KEY_LIMIT }
0813  I                    11,         { LOCATE_MODE }
0814  I                    12,         { LOCK_ON_READ }
```

```
0815  I                          13,          { LOCK_ON_WRITE }
0816  I                          16,          { MANUAL_UNLOCKING }
0817  I                          16,          { MULTIBLOCK_COUNT }
0818  I                          17,          { MULTIBUFFER_COUNT }
0819  I                          6,           { NOLOCK }
0820  I                          18,          { NONEXISTENT_RECORD }
0821  I                          10,          { READ_AHEAD }
0822  I                          15,          { READ_REGARDLESS }
0823  I                          14,          { TIMEOUT_ENABLE }
0824  I                          14,          { TIMEOUT_PERIOD }
0825  I                          15,          { TRUNCATE_ON_PUT }
0826  I                          19,          { TT_CANCEL_CONTROL_O }
0827  I                          15,          { TT_UPCASE_INPUT }
0828  I                          9,           { TT_PROMPT }
0829  I                          19,          { TT_PURGE_TYPE_AHEAD }
0830  I                          14,          { TT_READ_NOECHO }
0831  I                          16,          { TT_READ_NOFILTER }
0832  I                          9,           { UPDATE_IF }
0833  I                          15,          { WAIT_FOR_RECORD }
0834  I                          12,          { WRITE_BEHIND }
0835  I
0836  I          { DATE PRIMARY }
0837  I
0838  I                          6,           { BACKUP$, }
0839  I                          8,           { CREATION$, }
0840  I                          10,          { EXPIRATION$, }
0841  I                          8,           { REVISION$, }
0842  I
0843  I          { FILE PRIMARY }
0844  I
0845  I                          10,          { ALLOCATION, }
0846  I                          19,          { BEST_TRY_CONTIGUOUS, }
0847  I                          11,          { BUCKET_SIZE, }
0848  I                          12,          { CLUSTER_SIZE, }
0849  I                          7,           { CONTEXT$ }
0850  I                          10,          { CONTIGUOUS, }
0851  I                          9,           { CREATE_IF }
0852  I                          12,          { DEFAULT_NAME, }
0853  I                          14,          { DEFERRED_WRITE, }
0854  I                          15,          { DELETE_ON_CLOSE, }
0855  I                          15,          { DIRECTORY_ENTRY, }
0856  I                          15,          { ERASE_ON_DELETE, }
0857  I                          9,           { EXTENSION, }
0858  I                          19,          { GLOBAL_BUFFER_COUNT, }
0859  I                          13,          { MT_BLOCK_SIZE, }
0860  I                          19,          { MT_CURRENT_POSITION, }
0861  I                          10,          { MT_NOT_EOF }
0862  I                          13,          { MT_PROTECTION, }
0863  I                          14,          { MT_OPEN_REWIND, }
0864  I                          15,          { MT_CLOSE_REWIND }
0865  I                          17,          { MAX_RECORD_NUMBER, }
0866  I                          16,          { MAXIMIZE_VERSION, }
0867  I                          4,           { NAME, }
0868  I                          8,           { NOBACKUP, }
0869  I                          19,          { NON_FILE_STRUCTURED }
0870  I                          17,          { OUTPUT_FILE_PARSE }
0871  I                          12,          { ORGANIZATION, }
```

```
0872  I                          5,          { OWNER, }
0873  I                          14,         { PRINT_ON_CLOSE, }
0874  I                          10,         { PROTECTION, }
0875  I                          10,         { READ_CHECK, }
0876  I                          8,          { REVISION, }
0877  I                          15,         { SEQUENTIAL_ONLY }
0878  I                          15,         { SUBMIT_ON_CLOSE, }
0879  I                          9,          { SUPERSEDE, }
0880  I                          9,          { TEMPORARY }
0881  I                          17,         { TRUNCATE_ON_CLOSE, }
0882  I                          14,         { USER_FILE_OPEN }
0883  I                          11,         { WINDOW_SIZE }
0884  I                          11,         { WRITE_CHECK, }
0885  I
0886  I          { JOURNALING PRIMARY }
0887  I
0888  I                          11,         { AFTER_IMAGE, }
0889  I                          10,         { AFTER_NAME }
0890  I                          11,         { AUDIT_TRAIL, }
0891  I                          10,         { AUDIT_NAME }
0892  I                          12,         { BEFORE_IMAGE, }
0893  I                          11,         { BEFORE_NAME }
0894  I                          13,         { RECOVERY_UNIT, }
0895  I
0896  I          { KEY PRIMARY }
0897  I
0898  I                          7,          { CHANGES, }
0899  I                          9,          { DATA_AREA, }
0900  I                          9,          { DATA_FILL, }
0901  I                          20,         { DATA_KEY_COMPRESSION, }
0902  I                          23,         { DATA_RECORD_COMPRESSION, }
0903  I                          10,         { DUPLICATES, }
0904  I                          10,         { INDEX_AREA, }
0905  I                          17,         { INDEX_COMPRESSION, }
0906  I                          10,         { INDEX_FILL, }
0907  I                          17,         { LEVEL1_INDEX_AREA, }
0908  I                          4,          { NAME$, }
0909  I                          8,          { NULL_KEY, }
0910  I                          10,         { NULL_VALUE, }
0911  I                          6,          { PROLOG(UE) - 1ST 6 CHARS ONLY }
0912  I                          0,          { SEG_LENGTH, }
0913  I                          0,          { SEG_POSITION, }
0914  I                          0,          { SEG_TYPE, }
0915  I
0916  I          { RECORD PRIMARY }
0917  I
0918  I                          10,         { BLOCK_SPAN, }
0919  I                          16,         { CARRIAGE_CONTROL, }
0920  I                          18,         { CONTROL_FIELD_SIZE, }
0921  I                          6,          { FORMAT, }
0922  I                          4,          { SIZE, }
0923  I
0924  I          { SHARING PRIMARY }
0925  I
0926  I                          6,          { DELETE }
0927  I                          3,          { GET }
0928  I                          11,         { MULTISTREAM }
```

```
0929  I                         8,          { PROHIBIT }
0930  I                         3,          { PUT }
0931  I                         6,          { UPDATE }
0932  I                         14,         { USER_INTERLOCK }
0933  I
0934  I         { SYSTEM PRIMARY }
0935  I
0936  I                         6,          { DEVICE, }
0937  I                         6,          { SOURCE, }
0938  I                         6           { TARGET, }
0939  I
0940  I                         );
0941  I
0942  I             { +
0943  I             These are the maximum values of number-valued secondaries.
0944  I             - }
0945  I
0946  I             SECONDARY_MAX := (
0947  I
0948  I         { RESERVE 0 }   0,          { DUMMY_SECONDARY$, }
0949  I
0950  I         { ACCESS PRIMARY }
0951  I
0952  I                         0,          { BLOCK_IO$ }
0953  I                         0,          { DELETE$ }
0954  I                         0,          { GET$ }
0955  I                         0,          { PUT$ }
0956  I                         0,          { RECORD_IO$ }
0957  I                         0,          { TRUNCATE$ }
0958  I                         0,          { UPDATE$ }
0959  I
0960  I         { ACL PRIMARY }
0961  I
0962  I                         0,          { ENTRY }
0963  I
0964  I         { ANALYSIS_OF_AREA PRIMARY }
0965  I                         0,          { RECLAIMED_SPACE }
0966  I
0967  I         { ANALYSIS_OF_KEY PRIMARY }
0968  I
0969  I                         0,          { DATA_FILL$, }
0970  I                         0,          { DATA_KEY_COMPRESSION, }
0971  I                         0,          { DATA_RECORD_COMPRESSION, }
0972  I                         0,          { DATA_RECORD_COUNT, }
0973  I                         0,          { DATA_SPACE_OCCUPIED, }
0974  I                         0,          { DELETIONS, }
0975  I                         0,          { DEPTH, }
0976  I                         0,          { DUPLICATES_PER_SIDR, }
0977  I                         0,          { INDEX_COMPRESSION, }
0978  I                         0,          { INDEX_FILL$, }
0979  I                         0,          { INDEX_SPACE_OCCUPIED, }
0980  I                         0,          { LEVEL1_RECORD_COUNT }
0981  I                         0,          { MEAN_DATA_LENGTH, }
0982  I                         0,          { MEAN_INDEX_LENGTH, }
0983  I                         0,          { RANDOM_ACCESSES, }
0984  I                         0,          { RANDOM_INSERTS, }
0985  I                         0,          { SEQUENTIAL_ACCESSES, }
```

```
0986  I
0987  I          { AREA PRIMARY }
0988  I
0989  I                              EDF$C_1GIGA,{ ALLOCATION$, }
0990  I                              0,          { BEST_TRY_CONTIGUOUS$, }
0991  I                              BKT$C_MAXBKTSIZ,    { BUCKET_SIZE$, }
0992  I                              0,          { CONTIGUOUS$, }
0993  I                              0,          { EXACT_POSITIONING$, }
0994  I                              EDF$C_1GIGA,{ EXTENSION$, }
0995  I                              16777215,   { POSITION$, }
0996  I                              65535,      { VOLUME$, }
0997  I
0998  I          { CONNECT PRIMARY }
0999  I
1000  I                              0,          { ASYNCHRONOUS }
1001  I                              0,          { BLOCK_IO }
1002  I                              EDF$C_1GIGA, { BUCKET_CODE }
1003  I                              EDF$C_1GIGA, { CONTEXT }
1004  I                              0,          { END_OF_FILE }
1005  I                              0,          { FILL_BUCKETS }
1006  I                              0,          { FAST_DELETE }
1007  I                              255,        { KEY_OF_REFERENCE }
1008  I                              0,          { KEY_GREATER_EQUAL }
1009  I                              0,          { KEY_GREATER_THAN }
1010  I                              0,          { KEY_LIMIT }
1011  I                              0,          { LOCATE_MODE }
1012  I                              0,          { LOCK_ON_READ }
1013  I                              0,          { LOCK_ON_WRITE }
1014  I                              0,          { MANUAL_UNLOCKING }
1015  I                              255,        { MULTIBLOCK_COUNT }
1016  I                              255,        { MULTIBUFFER_COUNT }
1017  I                              0,          { NOLOCK }
1018  I                              0,          { NONEXISTENT_RECORD }
1019  I                              0,          { READ_AHEAD }
1020  I                              0,          { READ_REGARDLESS }
1021  I                              0,          { TIMEOUT_ENABLE }
1022  I                              255,        { TIMEOUT_PERIOD }
1023  I                              0,          { TRUNCATE_ON_PUT }
1024  I                              0,          { TT_CANCEL_CONTROL_O }
1025  I                              0,          { TT_UPCASE_INPUT }
1026  I                              0,          { TT_PROMPT }
1027  I                              0,          { TT_PURGE_TYPE_AHEAD }
1028  I                              0,          { TT_READ_NOECHO }
1029  I                              0,          { TT_READ_NOFILTER }
1030  I                              0,          { UPDATE_IF }
1031  I                              0,          { WAIT_FOR_RECORD }
1032  I                              0,          { WRITE_BEHIND }
1033  I
1034  I          { DATE PRIMARY }
1035  I
1036  I                              0,          { BACKUP$, }
1037  I                              0,          { CREATION$, }
1038  I                              0,          { EXPIRATION$, }
1039  I                              0,          { REVISION$, }
1040  I
1041  I          { FILE PRIMARY }
1042  I
```

```
1043  I                     EDF$C_1GIGA,{ ALLOCATION, }
1044  I                     0,          { BEST_TRY_CONTIGUOUS, }
1045  I                     BKT$C_MAXBKTSIZ,    { BUCKET_SIZE, }
1046  I                     EDF$C_1GIGA,{ CLUSTER_SIZE, }
1047  I                     EDF$C_1GIGA, { CONTEXT }
1048  I                     0,          { CONTIGUOUS, }
1049  I                     0,          { CREATE_IF }
1050  I                     0,          { DEFAULT_NAME, }
1051  I                     0,          { DEFERRED_WRITE, }
1052  I                     0,          { DELETE_ON_CLOSE, }
1053  I                     0,          { DIRECTORY_ENTRY, }
1054  I                     0,          { ERASE_ON_DELETE, }
1055  I                     EDF$C_1GIGA,{ EXTENSION, }
1056  I                     EDF$C_MAX_GBL_BUFS, { GLOBAL_BUFFER_COUNT, }
1057  I                     65532,      { MT_BLOCK_SIZE, }
1058  I                     0,          { MT_CURRENT_POSITION, }
1059  I                     0,          { MT_NOT_EOF }
1060  I                     0,          { MT_PROTECTION, }
1061  I                     0,          { MT_OPEN_REWIND, }
1062  I                     0,          { MT_CLOSE_REWIND }
1063  I                     EDF$C_1GIGA,{ MAX_RECORD_NUMBER, }
1064  I                     0,          { MAXIMIZE_VERSION, }
1065  I                     0,          { NAME, }
1066  I                     0,          { NOBACKUP, }
1067  I                     0,          { NON_FILE_STRUCTURED }
1068  I                     0,          { OUTPUT_FILE_PARSE }
1069  I                     0,          { ORGANIZATION, }
1070  I                     0,          { OWNER, }
1071  I                     0,          { PRINT_ON_CLOSE, }
1072  I                     0,          { PROTECTION, }
1073  I                     0,          { READ_CHECK, }
1074  I                     65535,      { REVISION, }
1075  I                     0,          { SEQUENTIAL_ONLY }
1076  I                     0,          { SUBMIT_ON_CLOSE, }
1077  I                     0,          { SUPERSEDE, }
1078  I                     0,          { TEMPORARY }
1079  I                     0,          { TRUNCATE_ON_CLOSE, }
1080  I                     0,          { USER_FILE_OPEN }
1081  I                     EDF$C_1GIGA, { WINDOW_SIZE }
1082  I                     0,          { WRITE_CHECK, }
1083  I
1084  I             { JOURNALING PRIMARY }
1085  I
1086  I                     0,          { AFTER_IMAGE, }
1087  I                     0,          { AFTER_NAME }
1088  I                     0,          { AUDIT_TRAIL, }
1089  I                     0,          { AUDIT_NAME }
1090  I                     0,          { BEFORE_IMAGE, }
1091  I                     0,          { BEFORE_NAME }
1092  I                     0,          { RECOVERY_UNIT, }
1093  I
1094  I             { KEY PRIMARY }
1095  I
1096  I                     0,          { CHANGES, }
1097  I                     254,        { DATA_AREA, }
1098  I                     100,        { DATA_FILL, }
1099  I                     99,         { DATA_KEY_COMPRESSION, }
```

```
1100  I                     99,             { DATA_RECORD_COMPRESSION, }
1101  I                     0,              { DUPLICATES, }
1102  I                     254,            { INDEX_AREA, }
1103  I                     99,             { INDEX_COMPRESSION, }
1104  I                     100,            { INDEX_FILL, }
1105  I                     254,            { LEVEL1_INDEX_AREA, }
1106  I                     0,              { NAME$, }
1107  I                     0,              { NULL_KEY, }
1108  I                     255,            { NULL_VALUE, }
1109  I                     3               { PROLOGUE }
1110  I                     255,            { SEG_LENGTH, }
1111  I                     16299,          { SEG_POSITION, }
1112  I                     0,              { SEG_TYPE, }
1113  I
1114  I             { RECORD PRIMARY }
1115  I
1116  I                     0,              { BLOCK_SPAN, }
1117  I                     0,              { CARRIAGE_CONTROL, }
1118  I                     255,            { CONTROL_FIELD_SIZE, }
1119  I                     0,              { FORMAT, }
1120  I                 EDF$K_MAXRECSIZ,    { SIZE, }
1121  I
1122  I             { SHARING PRIMARY }
1123  I
1124  I                     0,              { DELETE }
1125  I                     0,              { GET }
1126  I                     0,              { MULTISTREAM }
1127  I                     0,              { PROHIBIT }
1128  I                     0,              { PUT }
1129  I                     0,              { UPDATE }
1130  I                     0,              { USER_INTERLOCK }
1131  I
1132  I             { SYSTEM PRIMARY }
1133  I
1134  I                     0,              { DEVICE, }
1135  I                     0,              { SOURCE, }
1136  I                     0               { TARGET, }
1137  I
1138  I                     );
1139  I
1140  I                 { *
1141  I                 These are the secondary value types.
1142  I                  - }
1143  I
1144  I                 SEC_TYPE := (
1145  I
1146  I             { *
1147  I                     KEY:          STR,  NUM,  QUAL,  SW
1148  I             - }
1149  I
1150  I             { RESERVE 0 }       (FALSE,FALSE,FALSE,FALSE),          { DUMMY_SECONDARY$, }
1151  I
1152  I             { ACCESS PRIMARY }
1153  I
1154  I                                 (FALSE,FALSE,FALSE,TRUE),           { BLOCK_IO$ }
1155  I                                 (FALSE,FALSE,FALSE,TRUE),           { DELETE$ }
1156  I                                 (FALSE,FALSE,FALSE,TRUE),           { GET$ }
```

```
                        (FALSE,FALSE,FALSE,TRUE),       { PUT$ }
                        (FALSE,FALSE,FALSE,TRUE),       { RECORD_IO$ }
                        (FALSE,FALSE,FALSE,TRUE),       { TRUNCATE$ }
                        (FALSE,FALSE,FALSE,TRUE),       { UPDATE$ }

    { ACL PRIMARY }

                        (TRUE,FALSE,FALSE,FALSE),       { ENTRY }

    { ANALYSIS_OF_AREA PRIMARY }

                        (FALSE,FALSE,FALSE,FALSE),      { RECLAIMED_SPACE }

    { ANALYSIS_OF_KEY PRIMARY }

                        (FALSE,FALSE,FALSE,FALSE),      { DATA_FILL$, }
                        (FALSE,FALSE,FALSE,FALSE),      { DATA_KEY_COMPRESSION, }
                        (FALSE,FALSE,FALSE,FALSE),      { DATA_RECORD_COMPRESSION, }
                        (FALSE,FALSE,FALSE,FALSE),      { DATA_RECORD_COUNT, }
                        (FALSE,FALSE,FALSE,FALSE),      { DATA_SPACE_OCCUPIED, }
                        (FALSE,FALSE,FALSE,FALSE),      { DELETIONS, }
                        (FALSE,FALSE,FALSE,FALSE),      { DEPTH, }
                        (FALSE,FALSE,FALSE,FALSE),      { DUPLICATES_PER_SIDR, }
                        (FALSE,FALSE,FALSE,FALSE),      { INDEX_COMPRESSION, }
                        (FALSE,FALSE,FALSE,FALSE),      { INDEX_FILL$, }
                        (FALSE,FALSE,FALSE,FALSE),      { INDEX_SPACE_OCCUPIED, }
                        (FALSE,FALSE,FALSE,FALSE),      { LEVEL1_RECORD_COUNT }
                        (FALSE,FALSE,FALSE,FALSE),      { MEAN_DATA_LENGTH, }
                        (FALSE,FALSE,FALSE,FALSE),      { MEAN_INDEX_LENGTH, }
                        (FALSE,FALSE,FALSE,FALSE),      { RANDOM_ACCESSES, }
                        (FALSE,FALSE,FALSE,FALSE),      { RANDOM_INSERTS, }
                        (FALSE,FALSE,FALSE,FALSE),      { SEQUENTIAL_ACCESSES, }

    { AREA PRIMARY }

                        (FALSE,TRUE,FALSE,FALSE),       { ALLOCATION$, }
                        (FALSE,FALSE,FALSE,TRUE),       { BEST_TRY_CONTIGUOUS$, }
                        (FALSE,TRUE,FALSE,FALSE),       { BUCKET_SIZE$, }
                        (FALSE,FALSE,FALSE,TRUE),       { CONTIGUOUS$, }
                        (FALSE,FALSE,FALSE,TRUE),       { EXACT_POSITIONING$, }
                        (FALSE,TRUE,FALSE,FALSE),       { EXTENSION$, }
                        (FALSE,FALSE,FALSE,FALSE),      { POSITION$, }
                        (FALSE,TRUE,FALSE,FALSE),       { VOLUME$, }

    { +
            KEY:          STR,  NUM,  QUAL,  SW
    - }

    { CONNECT PRIMARY }

                        (FALSE,FALSE,FALSE,TRUE),       { ASYNCHRONOUS }
                        (FALSE,FALSE,FALSE,TRUE),       { BLOCK_IO }
                        (FALSE,TRUE,FALSE,FALSE),       { BUCKET_CODE }
                        (FALSE,TRUE,FALSE,FALSE),       { CONTEXT }
                        (FALSE,FALSE,FALSE,TRUE),       { END_OF_FILE }
                        (FALSE,FALSE,FALSE,TRUE),       { FILL_BUCKETS }
                        (FALSE,FALSE,FALSE,TRUE),       { FAST_DELETE }
```

```
1214  I                         (FALSE,TRUE,FALSE,FALSE),       { KEY_OF_REFERENCE }
1215  I                         (FALSE,FALSE,FALSE,TRUE),       { KEY_GREATER_EQUAL }
1216  I                         (FALSE,FALSE,FALSE,TRUE),       { KEY_GREATER_THAN }
1217  I                         (FALSE,FALSE,FALSE,TRUE),       { KEY_LIMIT }
1218  I                         (FALSE,FALSE,FALSE,TRUE),       { LOCATE_MODE }
1219  I                         (FALSE,FALSE,FALSE,TRUE),       { LOCK_ON_READ }
1220  I                         (FALSE,FALSE,FALSE,TRUE),       { LOCK_ON_WRITE }
1221  I                         (FALSE,FALSE,FALSE,TRUE),       { MANUAL_UNLOCKING }
1222  I                         (FALSE,TRUE,FALSE,FALSE),       { MULTIBLOCK_COUNT }
1223  I                         (FALSE,TRUE,FALSE,FALSE),       { MULTIBUFFER_COUNT }
1224  I                         (FALSE,FALSE,FALSE,TRUE),       { NOLOCK }
1225  I                         (FALSE,FALSE,FALSE,TRUE),       { NONEXISTENT_RECORD }
1226  I                         (FALSE,FALSE,FALSE,TRUE),       { READ_AHEAD }
1227  I                         (FALSE,FALSE,FALSE,TRUE),       { READ_REGARDLESS }
1228  I                         (FALSE,FALSE,FALSE,TRUE),       { TIMEOUT_ENABLE }
1229  I                         (FALSE,TRUE,FALSE,FALSE),       { TIMEOUT_PERIOD }
1230  I                         (FALSE,FALSE,FALSE,TRUE),       { TRUNCATE_ON_PUT }
1231  I                         (FALSE,FALSE,FALSE,TRUE),       { TT_CANCEL_CONTROL_O }
1232  I                         (FALSE,FALSE,FALSE,TRUE),       { TT_UPCASE_INPUT }
1233  I                         (FALSE,FALSE,FALSE,TRUE),       { TT_PROMPT }
1234  I                         (FALSE,FALSE,FALSE,TRUE),       { TT_PURGE_TYPE_AHEAD }
1235  I                         (FALSE,FALSE,FALSE,TRUE),       { TT_READ_NOECHO }
1236  I                         (FALSE,FALSE,FALSE,TRUE),       { TT_READ_NOFILTER }
1237  I                         (FALSE,FALSE,FALSE,TRUE),       { UPDATE_IF }
1238  I                         (FALSE,FALSE,FALSE,TRUE),       { WAIT_FOR_RECORD }
1239  I                         (FALSE,FALSE,FALSE,TRUE),       { WRITE_BEHIND }
1240  I
1241  I          { DATE PRIMARY }
1242  I
1243  I                         (TRUE,FALSE,FALSE,FALSE),       { BACKUP$, }
1244  I                         (TRUE,FALSE,FALSE,FALSE),       { CREATION$, }
1245  I                         (TRUE,FALSE,FALSE,FALSE),       { EXPIRATION$, }
1246  I                         (TRUE,FALSE,FALSE,FALSE),       { REVISION$, }
1247  I
1248  I          { FILE PRIMARY }
1249  I
1250  I                         (FALSE,TRUE,FALSE,FALSE),       { ALLOCATION, }
1251  I                         (FALSE,FALSE,FALSE,TRUE),       { BEST_TRY_CONTIGUOUS, }
1252  I                         (FALSE,TRUE,FALSE,FALSE),       { BUCKET_SIZE, }
1253  I                         (FALSE,TRUE,FALSE,FALSE),       { CLUSTER_SIZE, }
1254  I                         (FALSE,TRUE,FALSE,FALSE),       { CONTEXT$ }
1255  I                         (FALSE,FALSE,FALSE,TRUE),       { CONTIGUOUS, }
1256  I                         (FALSE,FALSE,FALSE,TRUE),       { CREATE_IF }
1257  I                         (TRUE,FALSE,FALSE,FALSE),       { DEFAULT_NAME, }
1258  I                         (FALSE,FALSE,FALSE,TRUE),       { DEFERRED_WRITE, }
1259  I                         (FALSE,FALSE,FALSE,TRUE),       { DELETE_ON_CLOSE, }
1260  I                         (FALSE,FALSE,FALSE,TRUE),       { DIRECTORY_ENTRY, }
1261  I                         (FALSE,FALSE,FALSE,TRUE),       { ERASE_ON_DELETE, }
1262  I                         (FALSE,TRUE,FALSE,FALSE),       { EXTENSION, }
1263  I                         (FALSE,TRUE,FALSE,FALSE),       { GLOBAL_BUFFER_COUNT, }
1264  I                         (FALSE,TRUE,FALSE,FALSE),       { MT_BLOCK_SIZE, }
1265  I                         (FALSE,FALSE,FALSE,TRUE),       { MT_CURRENT_POSITION, }
1266  I                         (FALSE,FALSE,FALSE,TRUE),       { MT_NOT_EOF }
1267  I                         (FALSE,FALSE,FALSE,FALSE),      { MT_PROTECTION, }
1268  I                         (FALSE,FALSE,FALSE,TRUE),       { MT_OPEN_REWIND, }
1269  I                         (FALSE,FALSE,FALSE,TRUE),       { MT_CLOSE_REWIND }
1270  I                         (FALSE,TRUE,FALSE,FALSE),       { MAX_RECORD_NUMBER, }
```

```
1271  I                         (FALSE,FALSE,FALSE,TRUE),          { MAXIMIZE_VERSION, }
1272  I                         (TRUE,FALSE,FALSE,FALSE),          { NAME, }
1273  I                         (FALSE,FALSE,FALSE,TRUE),          { NOBACKUP, }
1274  I                         (FALSE,FALSE,FALSE,TRUE),          { NON_FILE_STRUCTURED }
1275  I                         (FALSE,FALSE,FALSE,TRUE),          { OUTPUT_FILE_PARSE }
1276  I                         (FALSE,FALSE,TRUE,FALSE),          { ORGANIZATION, }
1277  I                         (FALSE,FALSE,FALSE,FALSE),         { OWNER, }
1278  I                         (FALSE,FALSE,FALSE,TRUE),          { PRINT_ON_CLOSE, }
1279  I                         (FALSE,FALSE,FALSE,FALSE),         { PROTECTION, }
1280  I                         (FALSE,FALSE,FALSE,TRUE),          { READ_CHECK, }
1281  I                         (FALSE,TRUE,FALSE,FALSE),          { REVISION, }
1282  I                         (FALSE,FALSE,FALSE,TRUE),          { SEQUENTIAL_ONLY }
1283  I                         (FALSE,FALSE,FALSE,TRUE),          { SUBMIT_ON_CLOSE, }
1284  I                         (FALSE,FALSE,FALSE,TRUE),          { SUPERSEDE, }
1285  I                         (FALSE,FALSE,FALSE,TRUE),          { TEMPORARY }
1286  I                         (FALSE,FALSE,FALSE,TRUE),          { TRUNCATE_ON_CLOSE, }
1287  I                         (FALSE,FALSE,FALSE,TRUE),          { USER_FILE_OPEN }
1288  I                         (FALSE,TRUE,FALSE,FALSE),          { WINDOW_SIZE }
1289  I                         (FALSE,FALSE,FALSE,TRUE),          { WRITE_CHECK, }
1290  I
1291  I       { +
1292  I               KEY:          STR,  NUM,  QUAL,  SW
1293  I       - }
1294  I
1295  I       { JOURNAL PRIMARY }
1296  I
1297  I                         (FALSE,FALSE,FALSE,TRUE),          { AFTER_IMAGE, }
1298  I                         (TRUE,FALSE,FALSE,FALSE),          { AFTER_NAME }
1299  I                         (FALSE,FALSE,FALSE,TRUE),          { AUDIT_TRAIL, }
1300  I                         (TRUE,FALSE,FALSE,FALSE),          { AUDIT_NAME }
1301  I                         (FALSE,FALSE,FALSE,TRUE),          { BEFORE_IMAGE, }
1302  I                         (TRUE,FALSE,FALSE,FALSE),          { BEFORE_NAME }
1303  I                         (FALSE,FALSE,TRUE,FALSE),          { RECOVERY_UNIT, }
1304  I
1305  I       { KEY PRIMARY }
1306  I
1307  I                         (FALSE,FALSE,FALSE,TRUE),          { CHANGES, }
1308  I                         (FALSE,TRUE,FALSE,FALSE),          { DATA_AREA, }
1309  I                         (FALSE,TRUE,FALSE,FALSE),          { DATA_FILL, }
1310  I                         (FALSE,FALSE,FALSE,TRUE),          { DATA_KEY_COMPRESSION, }
1311  I                         (FALSE,FALSE,FALSE,TRUE),          { DATA_RECORD_COMPRESSION, }
1312  I                         (FALSE,FALSE,FALSE,TRUE),          { DUPLICATES, }
1313  I                         (FALSE,TRUE,FALSE,FALSE),          { INDEX_AREA, }
1314  I                         (FALSE,FALSE,FALSE,TRUE),          { INDEX_COMPRESSION, }
1315  I                         (FALSE,TRUE,FALSE,FALSE),          { INDEX_FILL, }
1316  I                         (FALSE,TRUE,FALSE,FALSE),          { LEVEL1_INDEX_AREA, }
1317  I                         (TRUE,FALSE,FALSE,FALSE),          { NAME$, }
1318  I                         (FALSE,FALSE,FALSE,TRUE),          { NULL_KEY, }
1319  I                         (FALSE,FALSE,FALSE,FALSE),         { NULL_VALUE, }
1320  I                         (FALSE,TRUE,FALSE,FALSE),          { PROLOGUE }
1321  I                         (FALSE,TRUE,FALSE,FALSE),          { SEG_LENGTH, }
1322  I                         (FALSE,TRUE,FALSE,FALSE),          { SEG_POSITION, }
1323  I                         (FALSE,FALSE,TRUE,FALSE),          { SEG_TYPE, }
1324  I
1325  I       { RECORD PRIMARY }
1326  I
1327  I                         (FALSE,FALSE,FALSE,TRUE),          { BLOCK_SPAN, }
```

```
1328  I                         (FALSE,FALSE,TRUE,FALSE),       { CARRIAGE_CONTROL, }
1329  I                         (FALSE,TRUE,FALSE,FALSE),       { CONTROL_FIELD_SIZE, }
1330  I                         (FALSE,FALSE,TRUE,FALSE),       { FORMAT, }
1331  I                         (FALSE,TRUE,FALSE,FALSE),       { SIZE, }
1332  I
1333  I        { *
1334  I              KEY:          STR,  NUM,  QUAL,  SW
1335  I        - }
1336  I
1337  I        { SHARING PRIMARY }
1338  I
1339  I                         (FALSE,FALSE,FALSE,TRUE),       { DELETE }
1340  I                         (FALSE,FALSE,FALSE,TRUE),       { GET }
1341  I                         (FALSE,FALSE,FALSE,TRUE),       { MULTISTREAM }
1342  I                         (FALSE,FALSE,FALSE,TRUE),       { PROHIBIT }
1343  I                         (FALSE,FALSE,FALSE,TRUE),       { PUT }
1344  I                         (FALSE,FALSE,FALSE,TRUE),       { UPDATE }
1345  I                         (FALSE,FALSE,FALSE,TRUE),       { USER_INTERLOCK }
1346  I
1347  I        { SYSTEM PRIMARY }
1348  I
1349  I                         (TRUE,FALSE,FALSE,FALSE),       { DEVICE, }
1350  I                         (FALSE,FALSE,TRUE,FALSE),       { SOURCE, }
1351  I                         (FALSE,FALSE,TRUE,FALSE)        { TARGET, }
1352  I
1353  I                         );
```

```
1355  I       { +
1356  I       This is the QTAB array, which controls the asking and processing of questions.
1357  I       - }
1358  I       QTAB    :=      (
1359  I
1360  I       { +
1361  I       QUESTION_OFFSET
1362  I       ANSWER_CLASS,           DEFAULT_OK,     DEFAULT,        LOW_BOUND,      HIGH_BOUND,     KEY_TABLE,      STATE_TABLE
1363  I       - }
1364  I       { EDF$K_DATA_FILE_NAME }
1365  I       (STRING_ANSWER,         TRUE,           0,              0,              0,              0,              0),
1366  I       { EDF$K_FDL_TITLE }
1367  I       (STRING_ANSWER,         TRUE,           0,              0,              0,              0,              0),
1368  I       { EDF$K_KEY_NAME }
1369  I       (STRING_ANSWER,         TRUE,           0,              0,              0,              0,              0),
1370  I       { EDF$K_ANALYSIS }
1371  I       (STRING_ANSWER,         TRUE,           0,              0,              0,              0,              0),
1372  I       { EDF$K_OUTPUT }
1373  I       (STRING_ANSWER,         TRUE,           0,              0,              0,              0,              0),
1374  I       { EDF$K_DATA_KEY_COMP }
1375  I       (REAL_ANSWER,           TRUE,           0,              -99,            99,             0,              0),
1376  I       { EDF$K_DATA_RECORD_COMP }
1377  I       (REAL_ANSWER,           TRUE,           0,              -99,            99,             0,              0),
1378  I       { EDF$K_INDEX_RECORD_COMP }
1379  I       (REAL_ANSWER,           TRUE,           0,              -99,            99,             0,              0),
1380  I       { +
1381  I       QUESTION_OFFSET
1382  I       ANSWER_CLASS,           DEFAULT_OK,     DEFAULT,        LOW_BOUND,      HIGH_BOUND,     KEY_TABLE,      STATE_TABLE
1383  I       - }
1384  I       { EDF$K_KEY_COMP_WANTED }
1385  I       (BOOLEAN_ANSWER,        TRUE,           EDF$K_YES,      0,              0,              0,              0),
1386  I       { EDF$K_REC_COMP_WANTED }
1387  I       (BOOLEAN_ANSWER,        TRUE,           EDF$K_YES,      0,              0,              0,              0),
1388  I       { EDF$K_IDX_COMP_WANTED }
1389  I       (BOOLEAN_ANSWER,        TRUE,           EDF$K_YES,      0,              0,              0,              0),
1390  I       { EDF$K_ASCENDING_ADDED }
1391  I       (BOOLEAN_ANSWER,        TRUE,           EDF$K_NO,       0,              0,              0,              0),
1392  I       { EDF$K_ASCENDING_LOAD }
1393  I       (BOOLEAN_ANSWER,        TRUE,           EDF$K_NO,       0,              0,              0,              0),
1394  I       { EDF$K_BLOCK_SPAN }
1395  I       (BOOLEAN_ANSWER,        TRUE,           EDF$K_YES,      0,              0,              0,              0),
1396  I       { EDF$K_CONFIRM }
1397  I       (BOOLEAN_ANSWER,        TRUE,           EDF$K_NO,       0,              0,              0,              0),
1398  I       { EDF$K_SEGMENTED }
1399  I       (BOOLEAN_ANSWER,        TRUE,           EDF$K_NO,       0,              0,              0,              0),
1400  I       { EDF$K_GLOBAL_WANTED }
1401  I       (BOOLEAN_ANSWER,        TRUE,           EDF$K_NO,       0,              0,              0,              0),
1402  I       { +
1403  I       QUESTION_OFFSET
1404  I       ANSWER_CLASS,           DEFAULT_OK,     DEFAULT,        LOW_BOUND,      HIGH_BOUND,     KEY_TABLE,      STATE_TABLE
1405  I       - }
1406  I       { EDF$K_KEY_CHANGES }
1407  I       (BOOLEAN_ANSWER,        TRUE,           EDF$K_YES,      0,              0,              0,              0),
1408  I       { EDF$K_KEY_DIST }
1409  I       (BOOLEAN_ANSWER,        TRUE,           EDF$K_NO,       0,              0,              0,              0),
1410  I       { EDF$K_KEY_DUPS }
1411  I       (BOOLEAN_ANSWER,        TRUE,           EDF$K_NO,       0,              0,              0,              0),
```

```
I         { EDF$K_RETURN }
I         (BOOLEAN_ANSWER,      TRUE,      0,                  0,          0,                  0,          0),
I         { EDF$K_CLUSTER_SIZE }
I         (INTEGER_ANSWER,      TRUE,      3,                  1,          EDF$C_1GIGA,        0,          0),
I         { EDF$K_ACTIVE_KEY }
I         (INTEGER_ANSWER,      TRUE,      0,                  0,          0,                  0,          0),
I         { +
I         QUESTION_OFFSET
I         ANSWER_CLASS,         DEFAULT_OK,  DEFAULT,          LOW_BOUND,  HIGH_BOUND,         KEY_TABLE,  STATE_TABLE
I         - }
I         { EDF$K_ADDED_COUNT }
I         (INTEGER_ANSWER,      TRUE,      0,                  0,          EDF$C_1GIGA,        0,          0),
I         { EDF$K_ADDED_COUNT_LOW }
I         (INTEGER_ANSWER,      TRUE,      0,                  0,          EDF$C_1GIGA,        0,          0),
I         { EDF$K_ADDED_COUNT_HIGH }
I         (INTEGER_ANSWER,      TRUE,      100000,             0,          EDF$C_1GIGA,        0,          0),
I         { EDF$K_BLOCKS_IN_BUCKET }
I         (INTEGER_ANSWER,      TRUE,      32,                 1,          BKT$C_MAXBKTSIZ,    0,          0),
I         { EDF$K_BUCKET_WEIGHT }
I         (KEYWORD_ANSWER,      TRUE,   EDF$K_FLATTER_FILES,   0,          0,                  0,          0),
I         { EDF$K_CARR_CTRL }
I         (KEYWORD_ANSWER,      TRUE,      FDL$C_CR,           0,          0,                  0,          0),
I         { EDF$K_CONTROL_SIZE }
I         (INTEGER_ANSWER,      TRUE,      2,                  1,          255,                0,          0),
I         { +
I         QUESTION_OFFSET
I         ANSWER_CLASS,         DEFAULT_OK,  DEFAULT,          LOW_BOUND,  HIGH_BOUND,         KEY_TABLE,  STATE_TABLE
I         - }
I         { EDF$K_CURRENT_FUNCTION }
I         (KEYWORD_ANSWER,      TRUE,      EDF$K_HELP,         0,          0,                  0,          0),
I         { EDF$K_DESIGN_CYCLE }
I         (KEYWORD_ANSWER,      TRUE,      EDF$K_WP,           0,          0,                  0,          0),
I         { EDF$K_DESIRED_FILL }
I         (INTEGER_ANSWER,      TRUE,      100,                0,          100,                0,          0),
I         { EDF$K_FILL_LOW }
I         (INTEGER_ANSWER,      TRUE,      50,                 0,          100,                0,          0),
I         { EDF$K_FILL_HIGH }
I         (INTEGER_ANSWER,      TRUE,      100,                0,          100,                0,          0),
I         { +
I         QUESTION_OFFSET
I         ANSWER_CLASS,         DEFAULT_OK,  DEFAULT,          LOW_BOUND,  HIGH_BOUND,         KEY_TABLE,  STATE_TABLE
I         - }
I         { EDF$K_GLOBAL_COUNT }
I         (INTEGER_ANSWER,      FALSE,     0,                  0,          65535,              0,          0),
I         { EDF$K_GRANULARITY }
I         (KEYWORD_ANSWER,      TRUE,      EDF$K_THREE,        0,          0,                  0,          0),
I         { EDF$K_INITIAL_COUNT }
I         (INTEGER_ANSWER,      FALSE,     0,                  0,          EDF$C_1GIGA,        0,          0),
I         { EDF$K_INITIAL_COUNT_LOW }
I         (INTEGER_ANSWER,      TRUE,      0,                  0,          EDF$C_1GIGA,        0,          0),
I         { EDF$K_INITIAL_COUNT_HIGH }
I         (INTEGER_ANSWER,      TRUE,      100000,             0,          EDF$C_1GIGA,        0,          0),
I         { EDF$K_KEY_POSITION }
I         (INTEGER_ANSWER,      TRUE,      0,                  0,        EDF$K_MAXRECSIZ,      0,          0),
I         { EDF$K_KEY_LOW }
I         (INTEGER_ANSWER,      TRUE,      1,                  0,          0,                  0,          0),
I         { EDF$K_KEY_HIGH }
```

```
        (INTEGER_ANSWER,        TRUE,          255,          0,          0,          0,          0),
        { EDF$K_KEY_SIZE }
        (INTEGER_ANSWER,        FALSE,         0,            0,          0,          0,          0),
        { +
        QUESTION_OFFSET
        ANSWER_CLASS,           DEFAULT_OK,    DEFAULT,      LOW_BOUND,  HIGH_BOUND, KEY_TABLE,  STATE_TABLE
        - }
        { EDF$K_KEY_TYPE }
        (KEYWORD_ANSWER,        TRUE,          FDL$C_STG,        0,          0,          0,          0),
        { EDF$K_LOAD_METHOD }
        (KEYWORD_ANSWER,        TRUE,   EDF$K_FAST_CONVERT,  0,          0,          0,          0),
        { EDF$K_MAX_RECORD_SIZE }
        (INTEGER_ANSWER,        FALSE,         0,            0,          0,          0,          0),
        { EDF$K_MEAN_RECORD_SIZE }
        (INTEGER_ANSWER,        FALSE,         0,            1,    EDF$K_MAXRECSIZ,  0,          0),
        { EDF$K_NUMBER_DUPS }
        (INTEGER_ANSWER,        TRUE,          0,            0,          EDF$C_1GIGA, 0,         0),
        { EDF$K_NUMBER_KEYS }
        (INTEGER_ANSWER,        TRUE,          1,            1,          255,        0,          0),
        { +
        QUESTION_OFFSET
        ANSWER_CLASS,           DEFAULT_OK,    DEFAULT,      LOW_BOUND,  HIGH_BOUND, KEY_TABLE,  STATE_TABLE
        - }
        { EDF$K_NUMBER_RECORDS }
        (INTEGER_ANSWER,        FALSE,         0,            0,          EDF$C_1GIGA, 0,         0),
        { EDF$K_PROLOGUE_VERSION }
        (INTEGER_ANSWER,        TRUE,          3,            0,          3,          0,          0),
        { EDF$K_PROMPTING }
        (KEYWORD_ANSWER,        TRUE,          EDF$K_FULL,   0,          0,          0,          0),
        { EDF$K_RECORD_FORMAT }
        (KEYWORD_ANSWER,        TRUE,          FDL$C_VAR,    0,          0,          0,          0),
        { EDF$K_RESPONSES }
        (KEYWORD_ANSWER,        TRUE,          EDF$K_AUTO,   0,          0,          0,          0),
        { EDF$K_SCRIPT_OPTION }
        (KEYWORD_ANSWER,        FALSE,         0,            0,          0,          0,          0),
        { EDF$K_SET_FUNCTION }
        (KEYWORD_ANSWER,        FALSE,         0,            0,          0,          0,          0),
        { EDF$K_SIZE_LOW }
        (INTEGER_ANSWER,        TRUE,          1,            1,    EDF$K_MAXRECSIZ,  0,          0),
        { EDF$K_SIZE_HIGH }
        (INTEGER_ANSWER,        TRUE,          1000,         1,    EDF$K_MAXRECSIZ,  0,          0),
        { EDF$K_SURFACE_OPTION }
        (KEYWORD_ANSWER,        TRUE,   EDF$K_LINE_SURFACE,  0,          0,          0,          0),
        { +
        QUESTION_OFFSET
        ANSWER_CLASS,           DEFAULT_OK,    DEFAULT,      LOW_BOUND,  HIGH_BOUND, KEY_TABLE,  STATE_TABLE
        - }
        { EDF$K_TEST_PRIMARY }
        (KEYWORD_ANSWER,        TRUE,      FDL$C_FILE,       0,          0,          0,          0),
        { EDF$K_TEST_SECOND/ Y }
        (OBJECT_ANSWER,         FALSE,         0,            0,          0,          0,          0),
        { EDF$K_TEST_SECONDARY_VALUE }
        (OBJECT_ANSWER,         FALSE,         0,            0,          0,          0,          0)

                          );

        NULL_STRING             := (
```

```
1526  I
1527  I                 0,                          { DSC$W_LENGTH }
1528  I                 DSC$K_DTYPE_T,              { DSC$B_DTYPE }
1529  I                 DSC$K_CLASS_D,              { DSC$B_CLASS }
1530  I                 NIL                         { DSC$A_POINTER }
1531  I
1532  I                       );
1533  I
1534  I         LINE_OBJECT_TEMPLATE    := (
1535  I
1536  I                 SEC,                        { LINE_OBJECT_TYPE }
1537  I                 NIL,                        { FORE }
1538  I                 NIL,                        { BACK }
1539  I
1540  I                 (                           { COMMENT }
1541  I                 0,
1542  I                 DSC$K_DTYPE_T,
1543  I                 DSC$K_CLASS_D,
1544  I                 NIL
1545  I                 ),
1546  I
1547  I                 (                           { STRING }
1548  I                 0,
1549  I                 DSC$K_DTYPE_T,
1550  I                 DSC$K_CLASS_D,
1551  I                 NIL
1552  I                 ),
1553  I
1554  I                 KEY,                        { PRIMARY }
1555  I                 0,                          { PRINUM }
1556  I                 DUMMY_SECONDARY$,           { SECONDARY }
1557  I                 0,                          { SECNUM }
1558  I                 0,                          { QUALIFIER }
1559  I                 0,                          { NUMBER }
1560  I                 TRUE,                       { SWITCH }
1561  I                 0,                          { OWNER_UIC }
1562  I
1563  I                 (                           { PROT_MASK }
1564  I                 FALSE,
1565  I                 FALSE,
1566  I                 FALSE,
1567  I                 FALSE,
1568  I                 FALSE,
1569  I                 FALSE,
1570  I                 FALSE,
1571  I                 FALSE,
1572  I                 FALSE,
1573  I                 FALSE,
1574  I                 FALSE,
1575  I                 FALSE,
1576  I                 FALSE,
1577  I                 FALSE,
1578  I                 FALSE,
1579  I                 FALSE,
1580  I                 FALSE,
1581  I                 FALSE,
1582  I                 FALSE,
```

```
1583  I                 FALSE,
1584  I                 FALSE,
1585  I                 FALSE,
1586  I                 FALSE,
1587  I                 FALSE,
1588  I                 FALSE,
1589  I                 FALSE,
1590  I                 FALSE,
1591  I                 FALSE,
1592  I                 FALSE,
1593  I                 FALSE,
1594  I                 FALSE,
1595  I                 FALSE
1596  I                 ),
1597  I
1598  I                 0,              { FID1 }
1599  I                 0,              { FID2 }
1600  I                 0               { FID3 }
1601  I
1602  I                 );
1603  I
1604  I             { End of File SRC$:EDFVALUE.PAS }
1605
1606            END.
1607                { End of file: SRC$:EDFVAR.PAS }
```

```
                                                                               .TITLE   EDFVAR
                                                                               .IDENT   \V04-000\

                                                          00000                .PSECT   $CODE,PIC,CON,REL,LCL,SHR,EXE,RD,NOWRT,2

                         00000001  00000041  00000000     00000 C.AAA:         .LONG    0,65,1
      00  00  00  54  53  45  44   5F  4C  44  46  08     0000C                .ASCII   <8>\FDL_DEST\<0><0><0>
                         00000001  00000041  00000000     00018 C.AAB:         .LONG    0,65,1
                                         00  54  54  02   00024                .ASCII   <2>\TT\<0>
                         00000001  00000041  00000000     00028 C.AAC.         .LONG    0,65,1
  45  4C  49  46  5F  4C  41  4E   52  55  4F  4A  0C     00034                .ASCII   <12>\JOURNAL_FILE\

                                                          00000                .PSECT   $LOCAL,-
                                                          00000                         PIC,CON,REL,LCL,NOSHR,NOEXE,RD,WRT,2

                                                          00000 FDL_DEST:
          00000000  00000000' 00000000  00000010'         00000                .ADDRESS .+16,0,C.AAA,0
                                                          00010                .BLKB    1
                                                          00011                         3
          00000000  00000018' 00000000  00000024'         00014 TT:            .ADDRESS .+16,0,C.AAB,0
                                                          00024                .BLKB    1
                                                          00025                         3
                                                          00028 JOURNAL_FILE:
          00000000  00000028' 00000000  00000038'         00028                .ADDRESS .+16,0,C.AAC,0
                                                          00038                .BLKB    1
                                                          00039                         3
                                                          0003C JOURNAL_ENABLED:
                                                 00       0003C                .BYTE    0
                                                          0003D                .BLKB    3
                                                          00040 JOURNAL_FILENAME:
                                                          00040                .BLKB    255
                                                          0013F                         1
                                                          00140 INPUT_FILENAME_DESC:
                                                          00140                .BLKB    8
                                                          00148 OUTPUT_FILENAME_DESC:
                                                          00148                .BLKB    8
                                                          00150 ANALYSIS_FILENAME_DESC:
                                                          00150                .BLKB    8
                                                          00158 RES_OUTPUT_FILENAME_DESC:
                                                          00158                .BLKB    8
                                                          00160 DEFAULT_FILENAME_DESC:
                                                          00160                .BLKB    8
                                                          00168 NL_DEV_DESC:
                                                          00168                .BLKB    8
                                                          00170 ANALYSIS_SPECIFIED:
                                                 00       00170                .BYTE    0
                                                          00171                .BLKB    3
                                                          00174 ANALYSIS_ONLY:
                                                 00       00174                .BYTE    0
                                                          00175                .BLKB    3
                                                 00       00178 EDITING:.BYTE           0
                                                          00179                .BLKB    3
                                                          0017C TAKE_DEFAULTS:
                                                 00       0017C                .BYTE    0
                                                          0017D                .BLKB    3
                                                          00180 NO_INPUT:
                                                 00       00180                .BYTE    0
```

```
                                                00181             .BLKB    3
                                                00184 AUTO_TUNE:
                                          00    00184             .BYTE    0
                                                00185             .BLKB    3
                                                00188 SYS$OUTPUT_NAME:
 00 3A 54 55 50 54 55 4F 24 53 59 53    00188             .ASCII   \SYS$OUTPUT:\<0>
                                                00194 SYS$INPUT_ERROR:
                                          00    00194             .BYTE    0
                                                00195             .BLKB    3
                                                00198 RMS_INPUT_ERROR:
                                          00    00198             .BYTE    0
                                                00199             .BLKB    3
                                                0019C RMS_OUTPUT_ERROR:
                                          00    0019C             .BYTE    0
                                                0019D             .BLKB    3
                                                001A0 CONTROL_ZEE_TYPED:
                                          00    001A0             .BYTE    0
                                                001A1             .BLKB    3
                                                001A4 MAIN_CTRLZ:
                                          00    001A4             .BYTE    0
                                                001A5             .BLKB    3
                                                001A8 MAIN_LEVEL:
                                          01    001A8             .BYTE    1
                                                001A9             .BLKB    3
                                                001AC QUESTION_TYPED:
                                          C     001AC             .BYTE    0
                                                001AD             .BLKB    3
                                                001B0 XY_PLOT:.BLKL     416
                                                00830 COLOR_PLOT:
                                                00830             .BLKL    416
                                                00EB0 XY_ARRAY:
                                                00EB0             .BLKL    819
                                                01B7C COLOR_ARRAY:
                                                01B7C             .BLKL    819
                                                02848 COLOR_ROW:
                                                02848             .BLKB    63
                                                02887                      1
                                                02888 BREAKPOINT_LEFT:
                                                02888             .BLKL    1
                                                0288C BREAKPOINT_MID:
                                                0288C             .BLKL    1
                                                02890 BREAKPOINT_RIGHT:
                                                02890             .BLKL    1
                                                02894 DEPTHPOINT_LEFT:
                                                02894             .BLKL    1
                                                02898 DEPTHPOINT_MID:
                                                02898             .BLKL    1
                                                0289C DEPTHPOINT_RIGHT:
                                                0289C             .BLKL    1
                                                028A0 EXAMPOINT_LEFT:
                                                028A0             .BLKL    1
                                                028A4 EXAMPOINT_MID:
                                                028A4             .BLKL    1
                                                028A8 EXAMPOINT_RIGHT:
                                                028A8             .BLKL    1
                                                028AC NUMPOINT_LEFT:
                                                028AC             .BLKL    1
```

```
                                                   028B0 NUMPOINT_MID:
                                                   028B0          .BLKL    1
                                                   028B4 NUMPOINT_RIGHT:
                                                   028B4          .BLKL    1
                                                   028B8 PAGEPOINT_LEFT:
                                                   028B8          .BLKL    1
                                                   028BC PAGEPOINT_MID:
                                                   028BC          .BLKL    1
                                                   028C0 PAGEPOINT_RIGHT:
                                                   028C0          .BLKL    1
                                                   028C4 GRAPH_TYPE:
                                                   028C4          .BLKL    1
                                                   028C8 CURRENT_GRAPH_INDEX:
                                                   028C8          .BLKL    1
                                                   028CC LAST_GRAPH_INDEX:
                                                   028CC          .BLKL    1
                                                   028D0 STEPS:   .BLKL    1
                                                   028D4 Y_LABEL:.BLKB    32
                                                   028F4 PRIMARY_WIDTH:
07 06 03 07 05 04 04 07 04 0F 10 03 06 00          028F4          .SIGNED_BYTE 0,6,3,16,15,4,7,4,4,5,7,3,6,7,6,5
                                    05 06          02902
                                                   02904 SECONDARY_WIDTH:
11 17 14 09 0F 05 06 08 09 03 03 06 08 00          02904          .SIGNED_BYTE 0,8,6,3,3,9,8,6,5,15,9,20,23,17,19,9,5,19,-
0A 13 0E 0F 11 10 13 14 0A 11 13 05 09 13          02912                17,10,20,19,16,17,15,14,19,10,19,11,10,17,-
0B 0C 0B 07 0B 08 0C 06 08 09 11 0A 0B 13          02920                9,8,6,12,8,11,7,11,12,11,16,17,16,9,11,12,-
0F 0A 12 06 11 10 10 0D 0C 0B 09 10 11 10          0292E                13,16,16,17,6,18,10,15,14,14,15,19,15,9,-
08 06 0C 0F 09 10 0E 13 09 0F 13 0F 0E 0E          0293C                19,14,16,9,15,12,6,8,10,8,10,19,11,12,7,-
0F 0F 0F 0E 0C 09 0A 07 0C 0B 13 0A 08 0A          0294A                10,9,12,14,15,15,15,9,19,13,19,10,13,14,-
11 13 08 04 10 11 0F 0E 0D 0A 13 0D 13 09          02958                15,17,16,4,8,19,17,12,5,14,10,10,8,15,15,-
0B 06 0E 11 09 09 0F 0F 08 0A 0A 0E 05 0C          02966                9,9,17,14,11,11,11,10,11,10,12,11,13,7,9,-
0A 0A 17 14 09 09 07 0D 0B 0C 0A 0B 0A 0B          02974                9,20,23,10,10,17,10,17,4,8,10,6,0,0,0,10,-
06 12 10 0A 00 00 00 06 0A 08 04 11 0A 11          02982                16,18,6,4,6,3,11,8,3,6,14,6,6,6
         06 06 06 0E 06 03 08 0B 03 06 04          02990
                                                   0299B          .BLKB    1
                                                   0299C SECONDARY_MAX:
   00000000 00000000 00000000 00000000 00000000    0299C          .LONG    0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,-
   00000000 00000000 00000000 00000000 00000000    029B0                   0,0,0,0,0,0,999999999,0,63,0,0,999999999,-
   00000000 00000000 00000000 00000000 00000000    029C4                   16777215,65535,0,0,999999999,999999999,0,-
   00000000 00000000 00000000 00000000 00000000    029D8                   0,0,255,0,0,0,0,0,0,255,255,0,0,0,0,0,-
   00000000 00000000 00000000 00000000 00000000    029EC                   255,0,0,0,0,0,0,0,0,0,0,0,0,999999999,-
   0000003F 00000000 3B9AC9FF 00000000 00000000    02A00                   0,63,999999999,999999999,0,0,0,0,0,0,0,-
   0000FFFF 00FFFFFF 3B9AC9FF 00000000 00000000    02A14                   999999999,32767,65532,0,0,0,0,0,999999999,-
   00000000 3B9AC9FF 3B9AC9FF 00000000 00000000    02A28                   0,0,0,0,0,0,0,0,0,0,65535,0,0,0,0
   00000000 00000000 000000FF 00000000 00000000    02A3C
   00000000 00000000 00000000 00000000 00000000    02A50
   00000000 00000000 00000000 000000FF 000000FF    02A64
   00000000 00000000 000000FF 00000000 00000000    02A78
   00000000 00000000 00000000 00000000 00000000    02A8C
   00000000 00000000 00000000 00000000 00000000    02AA0
   0000003F 00000000 3B9AC9FF 00000000 00000000    02AB4
   00000000 00000000 00000000 3B9AC9FF 3B9AC9FF    02AC8
   3B9AC9FF 00000000 00000000 00000000 00000000    02ADC
   00000000 00000000 00000000 0000FFFC 00007FFF    02AF0
   00000000 00000000 3B9AC9FF 00000000 00000000    02B04
   00000000 00000000 00000000 00000000 00000000    02B18
   00000000 0000FFFF 00000000 00000000 00000000    02B2C
                              00000000 00000000    02B40
```

```
00000000  00000000  3B9AC9FF  00000000  00000000
00000000  00000000  00000000  00000000  00000000
00000063  00000064  000000FE  00000000  00000000
00000064  00000063  000000FE  00000000  00000063
00000003  000000FF  00000000  00000000  000000FE
00000000  00000000  00000000  00003FAB  000000FF
00000000  00000000  00007DF0  00000000  000000FF
00000000  00000000  00000000  00000000  00000000
                    00000000  00000000  00000000

09 07 0C 06 01 03 04 0A 0B 0E 0D 04 08 0F
                              00 02

                                 6D 30 5B 1B
                                 6D 31 5B 1B
                                 6D 34 5B 1B
                                 6D 35 5B 1B
                                 6D 37 5B 1B

                                 00 00 00 00
                                 00 00 22 22
                                 00 00 00 09
00 00 00 00 00 09 0A 0D
                              00
                              09
                              1B
                              27
                              17
                              1A
                              3F
                                 07
```

```
02B48          .LONG   0,0,999999999,0,0,0,0,0,0,0,0,0,254,100,-
02B5C                  99,99,0,254,99,100,254,0,0,255,3,255,-
02B70                  16299,0,0,0,255,0,32240,0,0,0,0,0,0,0,0,-
02B84                  0
02B98
02BAC
02BC0
02BD4
02BE8
02BF8 PRI_SEQ:.SIGNED_BYTE 15,8,4,13,14,11,10,4,3,1,6,12,7,9,2,0
02C06
02C08 ANSI_RESET:
02C08          .ASCII  <27>\[0m\
02C0C ANSI_BOLD:
02C0C          .ASCII  <27>\[1m\
02C10 ANSI_UNDERSCORE:
02C10          .ASCII  <27>\[4m\
02C14 ANSI_BLINK:
02C14          .ASCII  <27>\[5m\
02C18 ANSI_REVERSE:
02C18          .ASCII  <27>\[7m\
02C1C VID_STRING4:
02C1C          .BLKB   4
02C20 NULL_STRING4:
02C20          .ASCII  <0><0><0><0>
02C24 EMPTY_STRING:
02C24          .ASCII  \""\<0><0>
02C28 SHIFT:   .ASCII  <9><0><0><0>
02C2C CRLF_SHIFT:
02C2C          .ASCII  <13><10><9><0><0><0><0><0>
02C34 LOW_SHIFT:
02C34          .BLKB   3
02C37                  1
02C38 NULL_CHAR:
02C38          .BYTE   0
02C39          .BLKB   3
02C3C TAB:     .BYTE   9
02C3D          .BLKB   3
02C40 ESCAPE:  .BYTE   27
02C41          .BLKB   3
02C44 APOSTROPHE:
02C44          .BYTE   ^A\'\
02C45          .BLKB   3
02C48 CONTROL_W:
02C48          .BYTE   23
02C49          .BLKB   3
02C4C CONTROL_Z:
02C4C          .BYTE   26
02C4D          .BLKB   3
02C50 QUESTION_MARK:
02C50          .BYTE   ^A\?\
02C51          .BLKB   3
02C54 ERR_CHAR:
02C54          .BLKB   1
02C55                  3
02C58 CONTROL_G:
02C58          .BYTE   7
```

```
                 02C59               .BLKB   3
 00 00 0A 0D     02C5C CRLF:         .ASCII  <13><10><0><0>
                 02C60 TERMINAL_TYPE:
                 02C60               .BLKL   1
                 02C64 TERMINAL_SPEED:
                 02C64               .BLKL   1
                 02C68 ANSI_CRT:
          00     02C68               .BYTE   0
                 02C69               .BLKB   3
          00     02C6C REGIS:        .BYTE   0
                 02C6D               .BLKB   3
          00     02C70 DEC_CRT:      .BYTE   0
                 02C71               .BLKB   3
                 02C74 DEV_TYPE:
                 02C74               .BLKL   1
                 02C78 VIDEO_TERMINAL:
          00     02C78               .BYTE   0
                 02C79               .BLKB   3
                 02C7C VID_TERM:
                 02C7C               .BLKL   1
                 02C80 SCREEN_FLAGS:
                 02C80               .BLKB   20
                 02C94 OUT_LINE:
                 02C94               .BLKB   257
                 02D95                       3
    00000001     02D98 ONE:          .LONG   1
                 02D9C CHFFLAGS:
    00000000     02D9C               .LONG   0
                 02DA0 FLAGS:        .BLKB   1
                 02DA1                       3
                 02DA4 TEMP_FDL3$TYPE:
                 02DA4               .BLKB   3
                 02DA7                       1
                 02DA8 LINE_WIDTH:
                 02DA8               .BLKL   1
                 02DAC LINES_PER_PAGE:
                 02DAC               .BLKL   1
                 02DB0 DEST_IS_TERMINAL:
                 02DB0               .BLKB   1
                 02DB1                       3
                 02DB4 LINES_SHOWN:
                 02DB4               .BLKL   1
                 02DB8 MINIMUM_TERM_WIDTH:
    00000050     02DB8               .LONG   80
                 02DBC MINIMUM_VIDEO_PAGE:
    00000018     02DBC               .LONG   24
                 02DC0 SCROLLING_SET:
          00     02DC0               .BYTE   0
                 02DC1               .BLKB   3
                 02DC4 FULL_PROMPT:
          01     02DC4               .BYTE   1
                 02DC5               .BLKB   3
                 02DC8 TEMP_FULL_PROMPT:
          00     02DC8               .BYTE   0
                 02DC9               .BLKB   3
                 02DCC ORIG_TIME:
                 02DCC               .BLKF   1
```

Mod

EDT
LBR
LIB
EDT
EDT
CLI
CLI
SYS

```
                                                    02DD0 QUAD_TIME:
                                                    02DD0            .BLKB   8
                                                    02DD8 DEFAULT_PRIMARY:
                                              08    02DD8            .BYTE   8
                                                    02DD9            .BLKB   3
                                                    02DDC DEFAULT_PRINUM:
                                        00000000    02DDC            .LONG   0
                                        00000001    02DE0 COL_ONE:.LONG      1
                                                    02DE4 LINE_ONE:
                                        00000001    02DE4            .LONG   1
                                                    02DE8 LOWER_LINE:
                                        00000011    02DE8            .LONG   17
                                                    02DEC PROMPT_LINE:
                                        00000017    02DEC            .LONG   23
                                                    02DF0 PARAM_BLOCK:
                                                    02DF0            .BLKB   36
                                                    02E14 SEC_ATTR:
74 74 41 20 79 72 61 64 6E 6F 63 65 53 20           02E14            .ASCII  \ Secondary Attributes \<0><0>
            00 00 20 73 65 74 75 62 69 72           02E22
                                                    02E2C EDFHLP_STRING:
                  00 00 50 4C 48 46 44 45           02E2C            .ASCII  \EDFHLP\<0><0>
                                                    02E34 IDENT_STRING:
20 20 20 20 20 20 20 20 20 20 20 20 20 20           02E34            .ASCII  \                          VAX-11 FDL Editor\
31 2D 58 41 56 20 20 20 20 20 20 20 20 20           02E42
      72 6F 74 69 64 45 20 4C 44 46 20 31           02E50
                                                    02E5C IDENT_STRING_LENGTH:
                                        00000028    02E5C            .LONG   40
                                                    02E60 QUES_HINT:
20 72 6F 66 20 22 3F 22 20 65 70 79 54 28           02E60            .ASCII  \(Type "?" for list of Keywords)\<0>
72 6F 77 79 65 4B 20 66 6F 20 74 73 69 6C           02E6E
                              00 29 73 64           02E7C
                                                    02E80 EDF_HEADER:
64 45 20 4C 44 46 20 31 31 2D 58 41 56 20           02E80            .ASCII  \ VAX-11 FDL Editor \<0>
                        00 20 72 6F 74 69           02E8E
                                                    02E94 CONTINUE_TEXT:
20 4E 52 55 54 45 52 20 73 73 65 72 50 20           02E94            .ASCII  \ Press RETURN to continue (^Z for Main M\-
5E 28 20 65 75 6E 69 74 6E 6F 63 20 6F 74           02EA2                    \enu) \<0><0><0>
6E 65 4D 20 6E 69 61 4D 20 72 6F 66 20 5A           02EB0
                        00 00 00 20 29 75           02EBE
                                                    02EC4 ISTATUS:.BLKL      1
                                                    02EC8 FAB_DUMMY:
                                                    02EC8            .BLKA   1
                                                    02ECC RAB_DUMMY:
                                                    02ECC            .BLKA   1
                                                    02ED0 FDL_BLOCK:
                                                    02ED0            .BLKA   1
                                                    02ED4 DEF_CURRENT:
                                        00000000    02ED4            .LONG   0
                                                    02ED8 DEF_SCRATCH:
                                        00000000    02ED8            .LONG   0
                                                    02EDC DEF_HEAD:
                                        00000000    02EDC            .LONG   0
                                                    02EE0 DEF_TAIL:
                                        00000000    02EE0            .LONG   0
                                                    02EE4 DEF_SUCC:
                                        00000000    02EE4            .LONG   0
                                                    02EE8 DEF_PRED:
```

```
                00000000    02EE8           .LONG   0
                            02EEC DEF_ANL_HEAD:
                00000000    02EEC           .LONG   0
                            02EF0 DEF_ANL_TAIL:
                00000000    02EF0           .LONG   0
                            02EF4 DEF_SAVE_HEAD:
                00000000    02EF4           .LONG   0
                            02EF8 DEF_SAVE_TAIL:
                00000000    02EF8           .LONG   0
                            02EFC POINTING_AT_DEFINITION:
                      01    02EFC           .BYTE   1
                            02EFD           .BLKB   3
                            02F00 FILE_CREATED:
                      00    02F00           .BYTE   0
                            02F01           .BLKB   3
                            02F04 INPUT_DESC:
                            02F04           .BLKB   8
                            02F0C INPUT_STRING:
                            02F0C           .BLKB   255
                            0300B                   1
                            0300C INPUT_VALUE:
                            0300C           .BLKL   1
                            03010 INPUT_NUMBER:
                            03010           .BLKL   1
                            03014 QUAD_DESC:
                            03014           .BLKB   9
                            0301D                   3
                            03020 LINKED: .BLKB     1
                            03021                   3
                            03024 ACTIVE_AREA:
                            03024           .BLKL   1
                            03028 ACTIVE_PRIMARY:
                            03028           .BLKB   1
                            03029                   3
                            0302C VARIABLE_RECORDS:
                            0302C           .BLKB   1
                            0302D                   3
                            03030 CUR_MAX_REC:
                            03030           .BLKL   1
                            03034 BYTES_PER_BUCKET:
                            03034           .BLKL   1
                            03038 BUCKET_DEFAULT:
                            03038           .BLKL   1
                            0303C PRIMARY_INDEX_BUCKETS:
                            0303C           .BLKL   1
                            03040 INIT_PRIMARY_BUCKETS:
                            03040           .BLKL   32
                            030C0 ADDED_PRIMARY_BUCKETS:
                            030C0           .BLKL   32
                            03140 INIT_NUMBER_BUCKETS:
                            03140           .BLKL   32
                            031C0 ADDED_NUMBER_BUCKETS:
                            031C0           .BLKL   32
                            03240 RECS_PER_BUCKET:
                            03240           .BLKL   32
                            032C0 DEEPEST:.BLKL     1
                            032C4 FIRST_PLOT:
```

```
                                                       032C4           .BLKB   1
                                                       032C5                   3
                                                       032C8 OPTIMIZING:
                                                       032C8           .BLKB   1
                                                       032C9                   3
                                                       032CC VISIBLE_QUESTION:
                                                       032CC           .BLKB   1
                                                       032CD                   3
                                                       032D0 WAIT_HELP:
                                                       032D0           .BLKB   1
                                                       032D1                   3
                                             00000000  032D4 QTAB:     .LONG   0
                                                   01  032D8           .BYTE   1
00000000  00000000  00000000  00000000  00000000  032D9           .LONG   0,0,0,0,0,0
                                             00000000  032ED
                                                   01  032F1           .BYTE   1
00000000  00000000  00000000  00000000  00000000  032F2           .LONG   0,0,0,0,0,0
                                             00000000  03306
                                                   01  0330A           .BYTE   1
00000000  00000000  00000000  00000000  00000000  0330B           .LONG   0,0,0,0,0,0
                                             00000000  0331F
                                                   01  03323           .BYTE   1
00000000  00000000  00000000  00000000  00000000  03324           .LONG   0,0,0,0,0,0
                                             00000000  03338
                                                   01  0333C           .BYTE   1
00000000  00000000  00000000  00000000  00000000  0333D           .LONG   0,0,0,0,0,1
                                             000^0001  03351
                                                   01  03355           .BYTE   1
00000000  00000000  00000063  FFFFFF9D  00000000  03356           .LONG   0,-99,99,0,0,1
                                             00000001  0336A
                                                   01  0336E           .BYTE   1
00000000  00000000  00000063  FFFFFF9D  00000000  0336F           .LONG   0,-99,99,0,0,1
                                             00000001  03383
                                                   01  03387           .BYTE   1
00000000  00000000  00000063  FFFFFF9D  00000000  03388           .LONG   0,-99,99,0,0,2
                                             00000002  0339C
                                                   01  033A0           .BYTE   1
00000000  00000000  00000000  00000000  00000001  033A1           .LONG   1,0,0,0,0,2
                                             00000002  033B5
                                                   01  033B9           .BYTE   1
00000000  00000000  00000000  00000000  00000001  033BA           .LONG   1,0,0,0,0,2
                                             00000002  033CE
                                                   01  033D2           .BYTE   1
00000000  00000000  00000000  00000000  00000001  033D3           .LONG   1,0,0,0,0,2
                                             00000002  033E7
                                                   01  033EB           .BYTE   1
00000000  00000000  00000000  00000000  00000000  033EC           .LONG   0,0,0,0,0,2
                                             00000002  03400
                                                   01  03404           .BYTE   1
00000000  00000000  00000000  00000000  00000000  03405           .LONG   0,0,0,0,0,2
                                             00000002  03419
                                                   01  0341D           .BYTE   1
00000000  00000000  00000000  00000000  00000001  0341E           .LONG   1,0,0,0,0,2
                                             00000002  03432
                                                   01  03436           .BYTE   1
00000000  00000000  00000000  00000000  00000000  03437           .LONG   0,0,0,0,0,2
                                             00000002  0344B
```

```
_$2

Sym
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CLI
CLI
CLI
CLI
CLI
CLI
CLI
CLI
CLI
CLI
CLI
CLI
CLI
CLI
EDT
EDT
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EDT
EDT
EDT
EDT
EDT
EDT
EDT
EDT
LIB
LIB
STR
STR
SYS
```

```
                                                       01   0344F    .BYTE   1
00000000 00000000 00000000 00000000 00000000  03450    .LONG   0,0,0,0,0,2
                                             00000002  03464
                                                   01  03468    .BYTE   1
00000000 00000000 00000000 00000000 00000000  03469    .LONG   0,0,0,0,0,2
                                             00000002  0347D
                                                   01  03481    .BYTE   1
00000000 00000000 00000000 00000000 00000001  03482    .LONG   1,0,0,0,0,2
                                             00000002  03496
                                                   01  0349A    .BYTE   1
00000000 00000000 00000000 00000000 00000000  0349B    .LONG   0,0,0,0,0,2
                                             00000002  034AF
                                                   01  034B3    .BYTE   1
00000000 00000000 00000000 00000000 00000000  034B4    .LONG   0,0,0,0,0,2
                                             00000002  034C8
                                                   01  034CC    .BYTE   1
00000000 00000000 00000000 00000000 00000000  034CD    .LONG   0,0,0,0,0,3
                                             00000003  034E1
                                                   01  034E5    .BYTE   1
00000000 00000000 3B9AC9FF 00000001 00000003  034E6    .LONG   3,1,999999999,0,0,3
                                             00000003  034FA
                                                   01  034FE    .BYTE   1
00000000 00000000 00000000 00000000 00000000  034FF    .LONG   0,0,0,0,0,3
                                             00000003  03513
                                                   01  03517    .BYTE   1
00000000 00000000 3B9AC9FF 00000000 00000000  03518    .LONG   0,0,999999999,0,0,3
                                             00000003  0352C
                                                   01  03530    .BYTE   1
00000000 00000000 3B9AC9FF 00000000 00000000  03531    .LONG   0,0,999999999,0,0,3
                                             00000003  03545
                                                   01  03549    .BYTE   1
00000000 00000000 3B9AC9FF 00000000 000186A0  0354A    .LONG   100000,0,999999999,0,0,3
                                             00000003  0355E
                                                   01  03562    .BYTE   1
00000000 00000000 0000003F 00000001 00000020  03563    .LONG   32,1,63,0,0,4
                                             00000004  03577
                                                   01  0357B    .BYTE   1
00000000 00000000 00000000 00000000 00000001  0357C    .LONG   1,0,0,0,0,4
                                             00000004  03590
                                                   01  03594    .BYTE   1
00000000 00000000 00000000 00000000 00000009  03595    .LONG   9,0,0,0,0,3
                                             00000003  035A9
                                                   01  035AD    .BYTE   1
00000000 00000000 000000FF 00000001 00000002  035AE    .LONG   2,1,255,0,0,4
                                             00000004  035C2
                                                   01  035C6    .BYTE   1
00000000 00000000 00000000 00000000 00000003  035C7    .LONG   3,0,0,0,0,4
                                             00000004  035DB
                                                   01  035DF    .BYTE   1
00000000 00000000 00000000 00000000 00000003  035E0    .LONG   3,0,0,0,0,3
                                             00000003  035F4
                                                   01  035F8    .BYTE   1
00000000 00000000 00000064 00000000 00000064  035F9    .LONG   100,0,100,0,0,3
                                             00000003  0360D
                                                   01  03611    .BYTE   1
00000000 00000000 00000064 00000000 00000032  03612    .LONG   50,0,100,0,0,3
                                             00000003  03626
```

```
                                                 01  0362A      .BYTE   1
00000000  00000000  00000064  00000000     00000064  0362B      .LONG   100,0,100,0,0,3
                                           00000003  0363F
                                                 00  03643      .BYTE   0
00000000  00000000  0000FFFF  00000000     00000000  03644      .LONG   0,0,65535,0,0,4
                                           00000004  03658
                                                 01  0365C      .BYTE   1
00000000  00000000  00000000  00000000     00000002  0365D      .LONG   2,0,0,0,0,3
                                           00000003  03671
                                                 00  03675      .BYTE   0
00000000  00000000  3B9AC9FF  00000000     00000000  03676      .LONG   0,0,999999999,0,0,3
                                           00000003  0368A
                                                 01  0368E      .BYTE   1
00000000  00000000  3B9AC9FF  00000000     00000000  0368F      .LONG   0,0,999999999,0,0,3
                                           00000003  036A3
                                                 01  036A7      .BYTE   1
00000000  00000000  3B9AC9FF  00000000     000186A0  036A8      .LONG   100000,0,999999999,0,0,3
                                           00000003  036BC
                                                 01  036C0      .BYTE   1
00000000  00000000  00007DF0  00000000     00000000  036C1      .LONG   0,0,32240,0,0,3
                                           00000003  036D5
                                                 01  036D9      .BYTE   1
00000000  00000000  00000000  00000000     00000001  036DA      .LONG   1,0,0,0,0,3
                                           00000003  036EE
                                                 01  036F2      .BYTE   1
00000000  00000000  00000000  00000000     000000FF  036F3      .LONG   255,0,0,0,0,3
                                           00000003  03707
                                                 00  0370B      .BYTE   0
00000000  00000000  00000000  00000000     00000000  0370C      .LONG   0,0,0,0,0,4
                                           00000004  03720
                                                 01  03724      .BYTE   1
00000000  00000000  00000000  00000000     00000021  03725      .LONG   33,0,0,0,0,4
                                           00000004  03739
                                                 01  0373D      .BYTE   1
00000000  00000000  00000000  00000000     00000000  0373E      .LONG   0,0,0,0,0,3
                                           00000003  03752
                                                 00  03756      .BYTE   0
00000000  00000000  00000000  00000000     00000000  03757      .LONG   0,0,0,0,0,3
                                           00000003  0376B
                                                 00  0376F      .BYTE   0
00000000  00000000  00007DF0  00000001     00000000  03770      .LONG   0,1,32240,0,0,3
                                           00000003  03784
                                                 01  03788      .BYTE   1
00000000  00000000  3B9AC9FF  00000000     00000000  03789      .LONG   0,0,999999999,0,0,3
                                           00000003  0379D
                                                 01  037A1      .BYTE   1
00000000  00000000  000000FF  00000001     00000001  037A2      .LONG   1,1,255,0,0,3
                                           00000003  037B6
                                                 00  037BA      .BYTE   0
00000000  00000000  3B9AC9FF  00000000     00000000  037BB      .LONG   0,0,999999999,0,0,3
                                           00000003  037CF
                                                 01  037D3      .BYTE   1
00000000  00000000  00000003  00000000     00000003  037D4      .LONG   3,0,3,0,0,4
                                           00000004  037E8
                                                 01  037EC      .BYTE   1
00000000  00000000  00000000  00000000     00000000  037ED      .LONG   0,0,0,0,0,4
                                           00000004  03801
```

```
                                                         01   03805           .BYTE   1
      00000000  00000000  00000000  00000000  0000000E   03806           .LONG   14,0,0,0,0,4
                                              00000004   0381A
                                                    01   0381E           .BYTE   1
      00000000  00000000  00000000  00000000  00000000   0381F           .LONG   0,0,0,0,0,4
                                              00000004   03833
                                                    00   03837           .BYTE   0
      00000000  00000000  00000000  00000000  00000000   03838           .LONG   0,0,0,0,0,4
                                              00000004   0384C
                                                    00   03850           .BYTE   0
      00000000  00000000  00000000  00000000  00000000   03851           .LONG   0,0,0,0,0,3
                                              00000003   03865
                                                    01   03869           .BYTE   1
      00000000  00000000  00007DF0  00000001  00000001   0386A           .LONG   1,1,32240,0,0,3
                                              00000003   0387E
                                                    01   03882           .BYTE   1
      00000000  00000000  00007DF0  00000001  000003E8   03883           .LONG   1000,1,32240,0,0,4
                                              00000004   03897
                                                    01   0389B           .BYTE   1
      00000000  00000000  00000000  00000000  00000005   0389C           .LONG   5,0,0,0,0,4
                                              00000004   038B0
                                                    01   038B4           .BYTE   1
      00000000  00000000  00000000  00000000  00000008   038B5           .LONG   8,0,0,0,0,6
                                              00000006   038C9
                                                    00   038CD           .BYTE   0
      00000000  00000000  00000000  00000000  00000000   038CE           .LONG   0,0,0,0,0,6
                                              00000006   038E2
                                                    00   038E6           .BYTE   0
      00000000  00000000  00000000  00000000  00000000   038E7           .LONG   0,0,0,0,0
                                                         038FB           .BLKB   1
                                                         038FC QTAB_OFFSET:
                                                         038FC           .BLKL   1
                                                  0000   03900 SDATA:    .SIGNED_WORD 0
                                               02   0E   03902           .SIGNED_BYTE 14,2
                                              00000000   03904           .LONG   0
                                                  0000   03908           .SIGNED_WORD 0
                                               02   0E   0390A           .SIGNED_BYTE 14,2
                                              00000000   0390C           .LONG   0
                                                  0000   03910           .SIGNED_WORD 0
                                               02   0E   03912           .SIGNED_BYTE 14,2
                                              00000000   03914           .LONG   0
                                                  0000   03918           .SIGNED_WORD 0
                                               02   0E   0391A           .SIGNED_BYTE 14,2
                                              00000000   0391C           .LONG   0
                                                  0000   03920           .SIGNED_WORD 0
                                               02   0E   03922           .SIGNED_BYTE 14,2
                                              00000000   03924           .LONG   0
                                                  0000   03928           .SIGNED_WORD 0
                                               02   0E   0392A           .SIGNED_BYTE 14,2
                                              00000000   0392C           .LONG   0
                                                         03930 RDATA:    .BLKF   11
 00  00  00  00  00  00  00  00  00  00  00  00  00  00   0395C BDATA:    .BYTE   0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,-
             00  00  00  00  00  00  00  00  00  00  00   0396A                   0,0,0,0
                                                         03975           .BLKB   3
                                                         03978 IDATA:    .BLKL   74
 00  00  00  00  00  00  00  00  00  00  00  00  00  00   03AA0 VDATA:    .BYTE   0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,-
 00  00  00  00  00  00  00  00  00  00  00  00  00  00   03AAE                   0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,-
```

```
00 00 00 00 00 00 00 00 00 00 00 00 00 00   03ABC                 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
00 00 00 00 00 00 00 00 00 00 00 00 00 00   03ACA
                     00 00 00 00 00 00 00   03AD8
                                            03ADF         .BLKB   1
                                            03AE0 TEMP_STRING255:
                                            03AE0         .BLKB   255
                                            03BDF                 1
                                            03BE0 TEMP_DESCRIPTOR:
                                            03BE0         .BLKB   8
                                            03BE8 QUERY_FLAG:
                                            03BE8         .BLKB   1
                                            03BE9                 3
                                  00000000  03BEC LOW_KEY:.LONG   0
                                            03BF0 HIGH_KEY:
                                  00000000  03BF0         .LONG   0
                                            03BF4 LOW_AREA:
                                  00000000  03BF4         .LONG   0
                                            03BF8 HIGH_AREA:
                                  00000000  03BF8         .LONG   0
                                            03BFC FOUND_AREA:
                                        00  03BFC         .BYTE   0
                                            03BFD         .BLKB   3
                                            03C00 FOUND_KEY:
                                        00  03C00         .BYTE   0
                                            03C01         .BLKB   3
                                        00  03C04 FOUND_O:.BYTE   0
                                            03C05         .BLKB   3
                                            03C08 MAX_KEY_SIZE:
                                            03C08         .BLKL   1
                                            03C0C MIN_KEY_SIZE:
                                            03C0C         .BLKL   1
                                            03C10 SEGMENT_WANTED:
            00 00 00 00 00 00 00 00         03C10         .BYTE   0,0,0,0,0,0,0,0
                                            03C18 SEGMENT_POSITION:
                                            03C18         .BLKL   8
                                            03C38 SEGMENT_LENGTH:
                                            03C38         .BLKL   8
                                            03C58 SEGMENT_NUMBER:
                                            03C58         .BLKL   1
                                            03C5C BUCKET_OVERHEAD:
                                            03C5C         .BLKL   1
                                            03C60 MIN_BUCKET:
                                            03C60         .BLKL   1
                                            03C64 ENTRY_SIZE:
                                            03C64         .BLKL   1
                                            03C68 LOWMAX: .BLKL   1
                                            03C6C EXTRA:  .BLKL   1
                                            03C70 CUR_MAX_FIXED:
                                            03C70         .BLKL   1
                                            03C74 MAX_STRING_ANSWER_LENGTH:
                                            03C74         .BLKL   1
                                            03C78 OLD_COUNT:
                                            03C78         .BLKL   1
                                            03C7C GLOBAL_SET:
                                            03C7C         .BLKB   1
                                            03C7D                 3
                                            03C80 NUMBER_KEYS_SET:
```

EXE

Mod

EDT
EDT
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                      00      03C80           .BYTE   0
                              03C81           .BLKB   3
                              03C84 ISAM_ORG:
                              03C84           .BLKB   1
                              03C85                   3
                              03C88 MAX_KEY_POSITION:
                              03C88           .BLKL   1
                              03C8C TEMP_REAL:
                              03C8C           .BLKF   1
                              03C90 TEMP_STATUS:
                              03C90           .BLKL   1
                              03C94 TEMP_INT2:
                              03C94           .BLKL   1
                              03C98 DEF:      .BLKL   1
                              03C9C NULL_STRING:
                        0000  03C9C           .SIGNED_WORD 0
                       02  0E 03C9E           .SIGNED_BYTE 14,2
                    00000000  03CA0           .LONG   0
                              03CA4 TEST:     .BLKB   64
                              03CE4 FULL_CHOICE:
                              03CE4           .BLKB   1
                              03CE5                   3
                              03CE8 SEC_TYPE:
                    88888880  03CE8           .FIELD  1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:1,1:0,1:0,-
                              03CEC                   1:0,1:1,1:0,1:0,1:0,1:1,1:0,1:0,1:0,1:1,-
                    00000001  03CEC                   1:0,1:0,1:0,1:1,1:0,1:0,1:0,1:1,1:0,1:0,-
                              03CF0                   1:0,1:1,1:1,1:0,1:0,1:0,1:0,1:0,1:0,1:0,-
                              03CF0                   1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,-
                              03CF0                   1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,-
                    00000000  03CF0                   1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,-
                              03CF4                   1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,-
                              03CF4                   1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,-
                              03CF4                   1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,-
                    88282000  03CF4                   1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,-
                              03CF8                   1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:1,-
                              03CF8                   1:0,1:0,1:0,1:0,1:0,1:0,1:1,1:0,1:1,1:0,-
                    82288202  03CF8                   1:0,1:0,1:0,1:1,1:0,1:0,1:0,1:1,1:0,1:1,-
                              03CFC                   1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:1,1:0,1:0,-
                              03CFC                   1:0,1:0,1:0,1:1,1:0,1:0,1:0,1:1,1:0,1:1,-
                    88888288  03CFC                   1:0,1:0,1:0,1:1,1:0,1:0,1:0,1:0,1:0,1:1,-
                              03D00                   1:0,1:0,1:0,1:1,1:0,1:0,1:0,1:1,1:0,1:1,-
                              03D00                   1:0,1:0,1:0,1:0,1:0,1:0,1:1,1:0,1:0,1:1,-
                    88882288  03D00                   1:0,1:0,1:0,1:1,1:0,1:0,1:0,1:1,1:0,1:0,-
                              03D04                   1:0,1:1,1:0,1:0,1:0,1:1,1:0,1:0,1:0,1:1,-
                              03D04                   1:0,1:1,1:0,1:0,1:0,1:1,1:0,1:0,1:0,1:0,-
                              03D04                   1:0,1:1,1:0,1:0,1:0,1:1,1:0,1:0,1:0,1:1,-
                    88888828  03D04                   1:0,1:0,1:0,1:1,1:0,1:0,1:0,1:1,1:0,1:1,-
                              03D08                   1:0,1:0,1:0,1:0,1:0,1:0,1:1,1:0,1:0,1:1,-
                              03D08                   1:0,1:0,1:0,1:0,1:1,1:0,1:0,1:0,1:1,1:0,-
                    11118888  03D08                   1:0,1:1,1:0,1:0,1:0,1:0,1:1,1:0,1:0,1:1,-
                              03D0C                   1:0,1:0,1:0,1:0,1:1,1:0,1:0,1:0,1:1,1:0,-
                              03D0C                   1:0,1:1,1:1,1:1,1:0,1:0,1:0,1:0,1:1,1:0,-
                    18822282  03D0C                   1:1,1:0,1:0,1:0,1:0,1:1,1:0,1:0,1:0,1:1,-
                              03D10                   1:0,1:0,1:0,1:0,1:0,1:0,1:1,1:0,1:1,1:0,-
                              03D10                   1:0,1:1,1:1,1:0,1:0,1:0,1:1,1:0,1:0,1:0,-
                    82228888  03D10                   1:0,1:1,1:1,1:0,1:0,1:0,1:1,1:1,1:0,1:0,-
                              03D14                   1:0,1:0,1:0,1:0,1:1,1:0,1:0,1:1,1:1,1:0,-
                              03D14                   1:0,1:1,1:1,1:0,1:0,1:0,1:1,1:1,1:0,1:0,-
```

```
                              81828808    03D14                1:0,1:1,1:0,1:0,1:0,1:1,1:0,1:0,1:0,1:0,-
                                          03D18                1:0,1:1,1:0,1:0,1:0,1:1,1:0,1:0,1:0,1:0,-
                                          03D18                1:0,1:0,1:0,1:1,1:0,1:0,1:0,1:1,1:0,1:1,-
                                          03D18                1·0,1:0,1:0,1:0,1:0,1:1,1:1,1:0,1:0,1:0,-
                              28080488    03D18                1.0,1:0,1:0,1:1,1:0,1:0,1:0,1:1,1:0,1:0,-
                                          03D1C                1:0,1:1,1:0,1:0,1:1,1:0,1:0,1:0,1:0,1:0,-
                                          03D1C                1:0,1:0,1:0,1:1,1:0,1:0,1:0,1:0,1:0,1:0,-
                              82888888    03D1C                1:0,1:1,1:0,1:1,1:0,1:0,1:0,1:0,1:0,1:1,-
                                          03D20                1:0,1:0,1:0,1:1,1:0,1:0,1:0,1:1,1:0,1:0,-
                                          03D20                1:0,1:1,1:0,1:0,1:0,1:1,1:0,1:0,1:0,1:1,-
                              84181818    03D20                1:0,1:1,1:0,1:0,1:0,1:0,1:0,1:1,1:0,1:0,-
                                          03D24                1:0,1:1,1:1,1:0,1:0,1:0,1:0,1:0,1:0,1:1,-
                                          03D24                1:1,1:0,1:0,1:0,1:0,1:0,1:0,1:1,1:1,1:0,-
                              28288822    03D24                1:0,1:0,1:0,1:0,1:1,1:0,1:0,1:0,1:0,1:1,-
                                          03D28                1:0,1:1,1:0,1:0,1:0,1:1,1:0,1:0,1:0,1:0,-
                                          03D28                1:0,1:1,1:0,1:0,1:0,1:1,1:0,1:0,1:0,1:1,-
                              42220812    03D28                1:0,1:1,1:0,1:0,1:0,1:0,1:0,1:1,1:0,1:1,-
                                          03D2C                1:0,1:0,1:0,1:1,1:0,1:0,1:1,1:0,1:0,1:0,-
                                          03D2C                1:0,1:0,1:0,1:1,1:0,1:0,1:0,1:0,1:0,1:1,-
                                          03D2C                1:0,1:0,1:0,1:1,1:0,1:0,1:0,1:1,1:0,1:0,-
                              88824248    03D2C                1:0,1:0,1:1,1:0,1:0,1:0,1:0,1:1,1:0,1:0,-
                                          03D30                1:1,1:0,1:0,1:1,1:0,1:0,1:0,1:0,1:1,1:0,-
                                          03D30                1:0,1:1,1:0,1:0,1:0,1:0,1:0,1:1,1:0,1:0,-
                              04418888    03D30                1:0,1:1,1:0,1:0,1:0,1:1,1:0,1:0,1:0,1:1,-
                                          03D34                1:0,1:0,1:0,1:1,1:0,1:0,1:0,1:1,1:0,1:0,-
                                          03D34                1:0,1:1,1:1,1:0,1:0,1:0,1:0,1:0,1:1,1:0,-
                                          03D34                1:0,1:0,1:1,1:0,4:0
                                          03D34 LINE_OBJECT_TEMPLATE:
                                    01    03D34         .BYTE    1
                     00000000   00000000  03D35         .LONG    0,0
                                  0000    03D3D         .SIGNED_WORD 0
                                02  0E    03D3F         .SIGNED_BYTE 14,2
                              00000000    03D41         .LONG    0
                                  0000    03D45         .SIGNED_WORD 0
                                02  0E    03D47         .SIGNED_BYTE 14,2
                              00000000    03D49         .LONG    0
                                    0B    03D4D         .BYTE    11
                              00000000    03D4E         .LONG    0
                                    00    03D52         .BYTE    0
          00000000   00000000   00000000  03D53         .LONG    0,0,0
                                    01    03D5F         .BYTE    1
                              00000000    03D60         .LONG    0
                              00000000    03D64         .FIELD   1:0,1:0,1·0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,-
                                          03D68                  1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,-
                                          03D68                  1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,1:0,-
                                          03D68                  1:0,1:0
          00000000   00000000   00000000  03D68         .LONG    0,0,0

                                          03D74         .END
```

COMMAND QUALIFIERS

```
  PASCAL/MACHINE/NODEBUG/NOCHECK/LIS=LIS$:EDFVAR/OBJ=OBJ$:EDFVAR MSRC$:EDFVAR

  /CHECK=(NOBOUNDS,NOCASE_SELECTORS,NOOVERFLOW,NOPOINTERS,NOSUBRANGE)
  /DEBUG=(NOSYMBOL$,NOTRACEBACK)
  /ENVIRONMENT= $255$DUA28:[EDF.OBJ]EDFVAR.PEN;1
  /LIST= $255$DUA28:[EDF.LIS]EDFVAR.LIS;1
  /OBJECT= $255$DUA28:[EDF.OBJ]EDFVAR.OBJ;1
  /NOCROSS_REFERENCE /ERROR_LIMIT=30 /NOG_FLOATING /MACHINE_CODE /NOOLD_VERSION /OPTIMIZE /NOSTANDARD /WARNINGS
```

COMPILER INTERNAL TIMING

Phase	Faults	CPU Time	Elapsed Time
Initialization	97	00:00.4	00:03.8
Source Analysis	732	00:14.5	02:40.1
Source Listing	41	00:02.3	00:05.3
Tree Construction	0	00:00.0	00:00.0
Flow Analysis	0	00:00.0	00:00.0
Profit Analysis	0	00:00.0	00:00.0
Context Analysis	0	00:00.0	00:00.0
Name Packing	0	00:00.0	00:00.0
Code Selection	0	00:00.0	00:00.0
Final	106	00:03.3	00:08.2
TOTAL	976	00:20.5	02:57.4

COMPILATION STATISTICS

```
  CPU Time:       00:20.5         (4706 Lines/Minute)
  Elapsed Time:   02:57.4
  Page Faults:    976
  Compilation Complete
```

EDT

EDT
MAP

EDTVAR
LIS

EDTSHR
MAP

EDT
REQ